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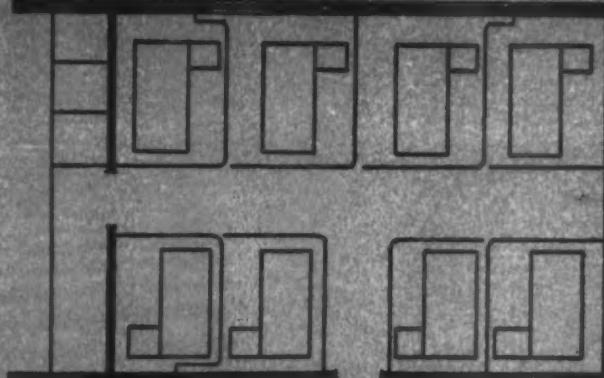
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# THE MODERN HOSPITAL

*A Monthly Journal Devoted to the Building, Equipment, Administration and Maintenance of Hospitals and Sanatoriums.*

Vol. XXXV

*July, 1930*

No. 1

## Eliminating the Explosion Hazard in Operating Rooms

By P. L. HOOVER, D.Sc.

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THE matter of the explosion of anesthetic gases in operating rooms has recently commanded widespread attention. The reason seems to be the increased number of such unfortunate occurrences. Since there has never been a satisfactory compilation of all such accidents, however, the present number may not be such a large increase as the public reports in newspapers and medical journals seem to suggest. On the other hand, the recent increase in reported explosions so largely concerns the use of the new anesthetic gas, ethylene, that such cases may represent a serious increase in the actual number of such accidents.

The immediate reason for the present study was the desire to eradicate, insofar as possible, the danger of such explosions in the operating rooms of the new Lakeside Hospital now under construction in Cleveland. A study of the reported accidents and of the conditions under which the explosions

occurred seemed to suggest that small sparks from the discharge of static electricity were the immediate cause of the explosions, rather than the careless use of open flames, the actual cautery or the new electrical appliances so largely utilized to-day in modern operating rooms. It appears that the explosions always centered about the anesthetic machine where two sources of static discharge are present: (1) contact between the machine and other apparatus or individuals, and (2) the discharge of static occurring in connection with the anesthetic machine itself and independent of outside conditions.

Further inquiry into the methods used in some of the more recently constructed hospitals revealed that, in almost all such institutions, elaborate methods of grounding all appa-

### A Physicist Experiments

THE study of reducing the explosion dangers of anesthetic gases has long held the attention of medical men. In this article a physicist attacks the problem and, by a series of experiments, shows how the accumulation and discharge of static electricity in operating rooms may be overcome by the use of proper humidity levels and by small changes in the type of anesthetic machines.

ratus and persons were utilized as the safest way of ridding the operating rooms of the danger of the concentration of static in individuals or in the apparatus. It appeared that such

precautions might not be adequate for eradicating the danger of sparks resulting from the collection of static electricity because of the difficulty of grounding individuals, due to the use of rubber soled shoes by surgeons, and because of the custom in some hospitals of covering floors, previously gridded and grounded, with rubber mats. It appeared that the desire of the construction people to prevent explosions was somewhat opposed by the desire of the surgeons to have their operating rooms quiet.

#### *Seeking the Desired Humidity Point*

This study immediately brought to our attention the problem that, in deference to the surgeon's desire for quiet in the operating rooms, we intended to cover our floors with rubber matting, which would obviate at once the possibility of grounding persons and apparatus on such a rubber floor unless cumbersome chains or wires were connected with all the apparatus and all the persons in the room. Moreover, the use of rubber matting, while preventing the discharge of static electricity, would render even more dangerous the grounding of all anesthetic machines to a special point in the floor, thus encouraging the discharge of electricity from individuals to anesthetic machines that contain explosive vapors. The line of thought started by such possibilities forced us to search for another, and possibly better way of ridding operating rooms of static electricity than by the principle of trying to ground all apparatus and all persons in the room.

Consultation with physicists who are experts in the field of static electricity brought the hope that, if we could maintain a proper and certain point of humidity of the air in the operating rooms at all times, we could do away entirely with the danger of static electricity, except as it concerned the collection and discharge of static within the anesthetic machine. The matter narrowed down to the question of what degree of humidity would be necessary to do away with the collection of static electricity and whether such a humidity point would be satisfactory for the patient. Another consideration was the question of whether this humidity point was one in which the surgeon could best accomplish his work. Since methods for humidifying the air are now well worked out, we did not contemplate any difficulty in securing the desired humidity point, although, as we later experienced, the actual accomplishment of this desired humidity point was more difficult than we had expected.

The trustees of the Lakeside Hospital at once approved the request that a competent physicist

be consulted and asked to carry out the experiments he thought necessary to determine the feasibility of this method of protection. A preliminary conference between physicists and surgeons revealed the fact that the exact humidity point that might be safe was unknown, since some of the conditions present in an operating room had never been studied from this point of view. It seemed wisest, therefore, to carry out careful tests under the actual working conditions of an operating room, so that all the materials utilized in operating rooms might be studied regarding their ability to store and discharge static electricity.

For this purpose one of us (Prof. P. L. Hoover) was given the use of an operating room equipped with a modern humidifying apparatus, in which the temperature and humidity could be changed at will. The floor of this room was covered with a rubber matting similar in type to that to be used in the new Lakeside Hospital, and all the materials concerned with surgical operations were subjected to actual experiment from this point of view. The following paragraphs represent the opinion of a physicist regarding the dangers of the explosion of anesthetic vapors in an operating room. They are presented as originally written, so that those interested may have the opinion of one working in a science allied to medicine, in language that is uninfluenced by medical and surgical terms. This opinion concerns the entire matter of fires and explosions in operating rooms due to whatever cause.

#### ANALYSIS OF EXPLOSION HAZARDS

Fires and explosions in operating rooms are due to a variety of causes. This variety of causes may, in turn, be classified in a variety of ways, but it may also be considered as a whole. That is, if the anesthesia agent is explosive and a source of ignition is present we have the only two essentials for an explosion. In fact, we have the explosion. It is obvious, therefore, that to eliminate the fire and explosion hazard we must eliminate either the explosive vapors or the source of ignition.

Oxygen and nitrous oxide are supporters of combustion but of themselves will neither burn nor explode. It is perfectly safe, therefore, to use these gases for anesthesia purposes in practically any case. Since practically all other known inhalation anesthetic agents are explosive or form explosive vapors and since it is not always so easy to eliminate the sources of ignition, the use of nitrous oxide for producing anesthesia is most highly recommended.

There are, of course, cases where other anesthetics are desirable or must be used. In such cases explosive or inflammable vapors are certain to exist in the operating room. It must be realized that 2 per cent of ether or ethylene vapor in a room produces an explosive mixture. Two per cent is not a large quantity and unless there is some particularly effective system of ventilation this quantity will soon collect in a room, at least in the neighborhood of the patient and the anesthetic machine. It is absolutely necessary, therefore, to remove all sources of ignition if an explosion is to be avoided. Since these sources of ignition are quite varied in character and the methods of their elimination likewise varied they will be considered under separate headings.

**Open flames:** The first type of hazard to be considered is the open flame. This type includes gas or spirit burners, smoking in any form and the like. Hazards of this character need not be amplified or explained in great detail because they are well understood. It suffices to say that the presence of anything of this character in an operating room is little short of suicide.

**Open sparks:** The advance of industrial electricity has made its mark in surgery as well as in other fields. As a result we find to-day a multitude of electrical appliances and apparatus in the hospitals. In many of these appliances open sparks are necessary for, or exist as a result of, their operation. If such apparatus is used in the operating room with inflammable anesthetics, it is a decided hazard. One cannot even characterize it as insidious or pernicious, for such apparatus is openly and obviously a most excellent source of ignition for any trace of explosive vapor. Apparatus of this character belongs in the same classification as open flames. In fact an electric spark may, under certain conditions, ignite an explosive mixture even more readily than an open flame.

#### *Spark Producing Equipment*

Apparatus coming under this classification includes electrosurgical units of the character of high frequency knives, cautery, diathermy, coagulation and fulguration units, radiographic fluoroscopic or x-ray equipment of the open or unprotected type, electric motors of the commutator type and open switches and rheostats. It is impossible to give a complete list of equipment that should be included in this class, but in general it may be said that if the apparatus or its control equipment produces a spark or is capable of producing a spark, it should be included.

It is absolutely necessary, therefore, to prohibit

the use of any inflammable anesthetic when apparatus of this class is being used in the operating room. In fact, it is highly desirable to have available anesthesia machines on which there are no ether or ethylene attachments—that is, machines in which ether or ethylene never was used. In this way one may be absolutely sure that there was no lingering trace of explosive vapor from some previous use.

#### *Hazards Potential and Real*

**Thermal cautery:** Under the classification of thermal cauteries are included all types of heated wires or elements. These usually consist of electrically heated wires. These wires being heated to a dull or possibly cherry red the temperature is in the neighborhood of 500 to 600 degrees centigrade. This temperature is certainly not far from the minimum temperature required to ignite ether and ethylene vapor and a review of the literature concerning this point does not help to settle the matter. Apparently many investigators have determined by various means the minimum temperature required to ignite ether vapor, and their results are widely different. The temperatures vary all the way from 180 to 1,000 degrees centigrade for approximately the same composition or proportion of ether to air. It is very possible and probable that this wide variation in observed values is due to the catalytic action of the heated elements, although none of the investigators seems to have considered it.

As a result it may offer a controversial point as to whether or not thermal cauteries of this type constitute a hazard. It should be realized, however, that they approach the danger zone and that the factor of safety is not large to say the least. It would be desirable to have some reliable and comprehensive research undertaken to determine this point and eliminate the doubt that now exists. Until such time, no undue risks should be taken with this type of thermal cautery.

**Static electricity:** As early as 600 B.C., Thales of Miletus, one of the "seven wise men" of early Greece, knew that certain substances would become electrified when rubbed with silk. This simple electrostatic experiment was, in fact, the origin of the entire science of electricity. This same simple phenomenon presents to-day a most pernicious hazard in operating rooms. A surgeon or attendant may become electrified by merely walking across the room or by brushing against the coverings of the operating table. Gases within the anesthesia machine may become electrified by friction within the valves when expanding from a high to a low pressure. The rubber

bags associated with the anesthesia machine may become electrified by the normal expansion and contraction due to the breathing of the patient.

Regardless of the origin of these static electrical charges, their presence constitutes a potential hazard. The danger is due to the fact that these charges cannot leak off to ground over the surface of insulating materials and thus remain *in situ* until a sufficient potential is built up to produce a discharge through the air, that is, a spark. These sparks are in no way different from those produced by ignition systems of automobiles and used for the express purpose of igniting gasoline vapor. It must be remembered, too, that ether vapor and ethylene are more explosive than gasoline. It is absolutely necessary, therefore, to provide some means of getting rid of these static charges as rapidly as they are formed and thus prevent an accumulation sufficient to produce a spark.

#### *Results of the Investigation*

It is not sufficient to ground all metal objects in the room. In fact, this practice may only enhance the danger because attendants walking about the room may still become electrified and, when they approach a grounded object, the spark discharge will invariably be more intense than if the object were not grounded.

The only safe solution is to maintain a high humidity in the operating room. It is a well established fact that when the atmosphere is sufficiently humid all objects become coated with a surface film of moisture. This moisture film is at least partially conducting for these static charges and they soon leak off to the ground. When the humidity is sufficiently high it is, therefore, impossible to electrify objects by friction because the charges leak off as rapidly as they are formed.

This method of eliminating static electrical discharges is not new. It is actually used in many industrial establishments where hazardous liquids and gases are used or manufactured. The only problem for the surgeon, therefore, is to determine what minimum value of humidity is required in the operating room to prevent these static discharges.

An investigation of this character has been conducted at the Lakeside Hospital and the results are probably of considerable interest to all surgeons and hospital authorities. The investigation was conducted in an actual operating room with all of the normal equipment and appliances intact. The only additions, other than measuring instruments, was a humidifier. This was installed in order that the humidity of the room

could be controlled and held at any desired value.

The results of this investigation cannot conveniently be put in tabular form because of the rather complex character of the phenomena. It is interesting to note, however, that glass and glazed tile cannot be electrified by friction if the relative humidity is above 45 or 50 per cent, bakelite 50 to 55 per cent, and celluloid 50 to 55 per cent. Rubber was quite varied in its properties. It was found, however, that by scuffing along the floor, a form of rubber matting, with either leather or rubber soled shoes only a trace of static charge could be detected at a relative humidity of 60 per cent. At 65 per cent relative humidity this trace had entirely disappeared. In fact, a woolen blanket and a hard rubber rod was the only combination found which would become electrified by friction at a relative humidity of 65 per cent. This particular combination retained its ability to become electrified even though the humidity was raised to 85 per cent.

In this investigation a gold leaf electroscope was used to detect the presence of a charge. Consistent results were found and consequently considerable weight was attached to them. The electrical surface resistivity of the materials was also measured. These measurements, however, were not very accurate and the variation found was quite small; so they were of little value.

Since it is practically impossible to maintain a relative humidity of 85 per cent in an operating room, it would seem desirable to prohibit the use of woolen blankets in operating rooms. Subject to this restriction the investigation would indicate that a relative humidity of 65 per cent should be maintained in the operating room in order to prevent static electrical discharges.

#### *How Necessary Humidity May Be Maintained*

A relative humidity of 65 per cent is not unduly high and can easily be maintained by a humidifier. During the winter months in the northern climates, however, when the outside temperature drops, there may be some condensation of moisture on the windows. If this should prove troublesome or undesirable it can be remedied by the use of double windows. Furthermore, if the temperature of the room is held between 65 and 73 degrees Fahrenheit, this humidity will not be uncomfortable and, in fact, from a physiological point of view, it is much more desirable than the dry atmosphere of most steam heated rooms.

The maintenance of high humidity in the operating room will not, however, prevent the formation of static charges within the anesthesia machine, and it is as important and necessary to eliminate these internal charges as those external to

the machine. There are records of disastrous explosions where the cause was internal to the machine and undoubtedly due to static discharges.

Metallic inserts properly constructed inside the rubber hose connection of the machine will remedy the situation there. Such metallic inserts cannot easily or satisfactorily be placed in the breathing bags. The only alternative then is to keep the inside of the bags moist. This may be accomplished by the insertion of small sponges thoroughly saturated with water before each operation, or else by the use of machines that bubble the gases through water.

#### *Machines Should Bubble Gases Through Water*

It is preferable to use machines that bubble the gases through water because this procedure eliminates the possibility of error due to a failure to insert the saturated sponges. From this point of view of the protection afforded, either method is perfectly satisfactory, but one or the other should absolutely be used.

**Spontaneous combustion:** It is a well known fact that an oily rag carelessly thrown into a corner somewhere has set many buildings on fire. It probably is not so well known that the same oily rag if placed in an atmosphere of oxygen or nitrous oxide will burn much more quickly. Moreover, oily rags are not the only offenders in this respect. Many combustible materials and particularly oils and greases are subject to spontaneous explosion when in an atmosphere of oxygen or nitrous oxide, especially when under pressure. Disastrous explosions have occurred where some workman carelessly or without knowledge of the danger, merely used oil as a lubricant on oxygen compressors.

It is important to realize therefore that oil, grease, or any combustible lubricant should not be used on any valve, stop cock or pressure regulating device on an oxygen or nitrous oxide line. Such valves and pressure regulating devices are to be kept in good working order by careful cleaning from time to time.

In this connection it should be pointed out that mixtures of oxygen or nitrous oxide with practically any of the other anesthetizing agents are subject to spontaneous explosion if the pressure is sufficiently high. This means that the anesthesia machine must be so constructed that the various gases cannot under any circumstance mix while under pressure. If this precaution is not taken an explosion is certain to result.

**Periodic inspection:** A further precautionary measure to reduce the fire and explosion hazard consists of a regular or periodic inspection of all electrical equipment, fixtures, extension cords and

outlets of the operating room. Probably the most malicious of all hazards are loose contacts, worn cords, grounded fixtures and the like. A loose contact on a lamp or other piece of otherwise harmless apparatus is certain to result in arcing or sparking and this, in turn, results in trouble. The only remedy for this is a periodic inspection of all equipment and fixtures in the operating room.

**Summary:** Of course no two operating rooms are identical and conditions may vary considerably in different hospitals but the factors considered in this paper are sufficiently fundamental so that they undoubtedly will be the major factors in most cases. A list of recommendations that should be followed in order to reduce or eliminate the fire and explosion hazard in operating rooms is given here:

The prohibition of open flames and smoking in the operating room.

The maintenance of a relative humidity of 65 per cent, or higher, in all operating rooms.

The exclusion of woolen blankets or woolen fabrics from operating room use.

Anesthesia machines of the type that bubble the gases through water; or a strict adherence to the practice of inserting saturated sponges in the rubber bags each time the machine is used.

The absolute prohibition of the use of oils or greases for lubricating the anesthesia machines.

With the use of electrical apparatus that produces or is capable of producing an open spark, the prohibition of explosive anesthetic agents such as ether and ethylene.

The exercise of considerable precaution when thermal cauteries are used in the presence of inflammable anesthetics.

A thorough inspection at least once every six months by the electrician or other competent person, of all outlets, fixtures, lamps, cords and apparatus of the operating room, with particular care given to locating grounds and loose contacts.

Immediate attention to needed repairs or the removal of defective apparatus from the operating room.

#### *The Findings Discussed*

The preceding report by a physicist should make it clear to those interested in modern hospital construction that, in the construction of operating rooms, definite plans should be drawn covering the dangers from the explosibility of anesthetic gases. These studies by an expert in the field of physics seem to make it quite clear that the use of a proper humidity point (65 per cent saturation) is the best means of safeguarding against explosions due to the collection of

static electricity. That part of the report that concerns open flames and the use of the cautery and of electrical apparatus giving definite sparks is so obvious to surgeons that it scarcely needs repetition. Moreover, insurance people and fire underwriters have long insisted upon adequate protection and care covering these risks.

The question of whether a 65 per cent humidity point is satisfactory to patients and surgeons may need some explanation, since this point has been questioned by physicians consulted during this study. We wish to make it clear that, with the range of temperatures that may exist in an operating room (65 to 80 degrees F.), a saturation of 65 per cent humidity is quite satisfactory in obviating the collection of static electricity except for the conditions already enumerated (chiefly the use of woolen blankets).

Regarding the relation of the humidity and temperature points as satisfactory to the patients and operators, it might be pointed out that in the meteorological reports for Cleveland, it is shown that the mean monthly temperature for the months of July, August and September is 71.7, 70.0 and 64.2, respectively, with a mean relative humidity at 8 a.m. for the same months of 74, 76 and 78, respectively. Thus we see that the conditions we wish to have in our operating rooms are not incompatible with the actual conditions existing in our atmosphere during summer months. Of course, the dangers in our operating rooms are thus seen to increase largely in the winter months when our methods of heating greatly cut down humidity levels. Our own studies here have shown that the humidity point in our operating rooms in midwinter under the conditions of steam heat may reach as low as 30 per cent humidity saturation.

#### *Small Changes in Machines Needed*

It is hoped that these studies will be of benefit in the matter of future hospital construction. They do reveal that there is a method by which one can safeguard against the danger of static electricity and, at the same time through the use of rubber flooring, have the quiet so desirable in the operating rooms.

In presenting this matter we wish to point out that further advances in the matter of perfecting anesthesia machines must be brought forward and that it is probable that the majority of the explosions are due to the collection of static actually within the anesthesia machine, even when it is grounded. To obviate the danger we agree, as has been previously advised, that bubbling the gases through water may be the simplest safeguard. The more complete studies

of Williams<sup>1</sup> and Henderson,<sup>2</sup> however, seem to indicate that greater safety would result from the utilization of metal rebreathing areas, such as small metal spirometers, in place of the distensible rubber bags. Were such a safeguard added to the anesthetic machines, we should probably eradicate one of our chief dangers.

The studies indicate that the accumulation and discharge of static electricity in operating rooms may be overcome by the use of proper humidity levels and by small changes in the type of anesthetic machines.

### What Is the Function of a Women's Board of Managers?

A women's board of managers in some hospitals consists of a volunteer group of women who serve largely in an advisory capacity and who are responsible in some instances for the furnishing of linen and for the organization of interest and effort towards forwarding the cause of the hospital. In other hospitals there exists a group of women who are placed in an official capacity and who are responsible for part, at least, of the financial and administrative functioning of the institution.

In some cases there are two boards, one of men and the other of women. The former may be called the "board of directors," while the latter may be styled the "board of women managers." In some instances the housekeeping, the purchase and repair of linens and even the purchase and preparation of food are assigned to this board. Under such circumstances the board of men directors is responsible for the raising of money and for maintaining a sound financial policy in the hospital. In such a situation the distraught superintendent is uncertain much of the time as to whether to discuss borderline matters with the directors or with the women managers.

A superintendent cannot serve two boards. It is conceded that a board of women managers may be able to understand housekeeping and dietary problems to a greater degree than do male boards. On the other hand, unless a superintendent is most inefficient it is his duty to understand and solve such problems.

In this connection should be stressed the importance of securing a well trained superintendent and of requiring him to carry on the details of hospital work, while the board avoids any act that might be destructive or discouraging in tendency by conflicting with the orders of the superintendent.

A hospital organization that possesses two boards is not administratively sound. The solution seems to lie in placing one in an advisory position and the other in direct charge of the hospital's administration. The former should be prohibited from interfering in any way with the intimate workings of the institution. Women can bring and have brought to hospitals a contribution that could not have been secured in any other way. Nevertheless, when a group unofficially attempts to superintend any portion of the hospital's work, damage rather than benefit to its morale will result.

<sup>1</sup> Williams, H. B., The Explosion Hazard in Anesthesia, *Jour. of the Am. Med. Asso.*, March 29, 1930, 918-920.

<sup>2</sup> Henderson, Yandell, The Hazard of Explosions of Ethylene and Other Anesthetics, *Jour. of the Am. Med. Asso.*, May 10, 1930, 1491-1498.

# Where Women of Every Economic Status Are Served

By JOHN N. HATFIELD

Assistant Superintendent, Pennsylvania Hospital, Philadelphia

**L**ATE in 1927, the Pennsylvania Hospital, Philadelphia, took over the active management of the Philadelphia Lying-In Hospital. Because the building had become obsolete and inadequate, a modern building of greater capacity was required.

An affiliation with the Pennsylvania Hospital was effected and plans were perfected to erect on a site contiguous to the general hospital plant a new building for the reception and treatment of maternity and gynecological cases. It was felt that such a move would benefit both institutions in that more efficient and economical service would be realized. It was significant that the Philadelphia Lying-In Hospital, established in 1828, the oldest maternity hospital in America and, so far as is known, the second of its type in the world, should merge with an institution founded in 1751, the oldest general hospital in this country.

A rather unusual experiment was undertaken in the construction of the Woman's Building of the Pennsylvania Hospital, in that the work was done by the hospital organization itself. It was the first time to our knowledge that a structure of its size, costing somewhat over \$1,000,000 had been constructed by a hospital organization. Not

only was it thus possible to effect a saving of some \$185,000 over bona fide bids, but through such an arrangement no interest other than that of the hospital was involved. As a consequence, results were achieved, both in time and in the quality of construction, the value of which is difficult to compute. Higher grade materials and workmanship than could possibly have been expected under any contractual arrangement outside of our own organization went into the erection of the building.

The Pennsylvania Hospital construction department was created to erect the building. The success of the venture was made possible because of the cooperation and coordination of all interests — the hospital administration, the architects, the engineers and the construction department. Weekly meetings were held where all those concerned discussed the problems at hand and made decisions, which enabled the construction department to obtain direct results.

Before work was started, competitive estimates were secured from contractors in all branches of the work. These made possible a basis of comparison with the cost of constructing the building directly under the hospital organization. The con-



*The main entrance of the Woman's Building, Pennsylvania Hospital, Philadelphia, is of Georgia Creole marble.*



*This operating room has an observation balcony that is separated from the room by means of a plate glass partition.*

tract documents brought in estimates which, together with the cost of field organization, management overhead and profit, as proposed by the construction companies previously considered, made up the total against which we compared our final costs.

In his final report to the hospital board, the late Milton B. Medary, of Zantzinger, Borie and Medary, architects, who designed the building and represented his firm throughout the construction period, made this statement: "In my own experience, I have known no building operation which has been conducted so satisfactorily and sympathetically and which has resulted in so

150 adults, 130 babies and seven members of the resident staff. It also has dormitory accommodations for fifteen medical students.

The basement contains the kitchen, the milk laboratory, the ice plant, the machinery room, the printing department, the ward patients' clothing room, the soiled linen room, the storage room and locker rooms, with toilet facilities for the help. This floor communicates directly with the Pennsylvania Hospital by means of a tunnel and provides access to the power plant, to the main storerooms, the laundry, the dining rooms, the x-ray rooms and the other major services.

On the first or street floor are the lobby, the

wholly satisfactory a structure as in this instance. The results have amply justified the confidence of the board in the methods proposed and in the organization made up of its own staff."

The Woman's Building occupies a lot 150 feet by 100 feet and has ten floors, with approximately 1,300,000 cubic feet of space. The exterior walls are dark red brick while the lower portion of the building to the sill line of the second floor windows is faced with Georgia Creole marble. The wall coping, bands and cornices are also of this material, the superstructure is of reinforced concrete and the architecture is a somewhat modified colonial design. The building provides for

offices, the reception and waiting rooms, the social service department, the prenatal, postnatal and well baby clinics, the record room, the locker and toilet rooms for outpatients and office personnel and an emergency room. The emergency room provides facilities for the admission of ward patients. In it is a bathing slab as well as all equipment necessary for an emergency delivery.

The second floor is devoted to the care of septic ward patients. It also houses the resident staff. For the treatment of septic cases five rooms of one and two beds each, an operating room, a small nursery and utility and sterilizing equipment are provided. The resident staff, consisting of a chief resident physician, two postgraduate interns, two interns, a supervising nurse and one anesthetist occupy quarters on this floor. There are, in addition, accommodations for fifteen medical students.

The third and fourth floors are alike and both are devoted to the care of ward patients. Each floor has a capacity of thirty beds and thirty-one bassinets. The largest ward on each of these floors contains ten beds and there are other wards or rooms having from one to four beds. In the treatment of obstetrical patients it is advisable to confine them to small groups and especially is it desirable to separate the expectant mothers

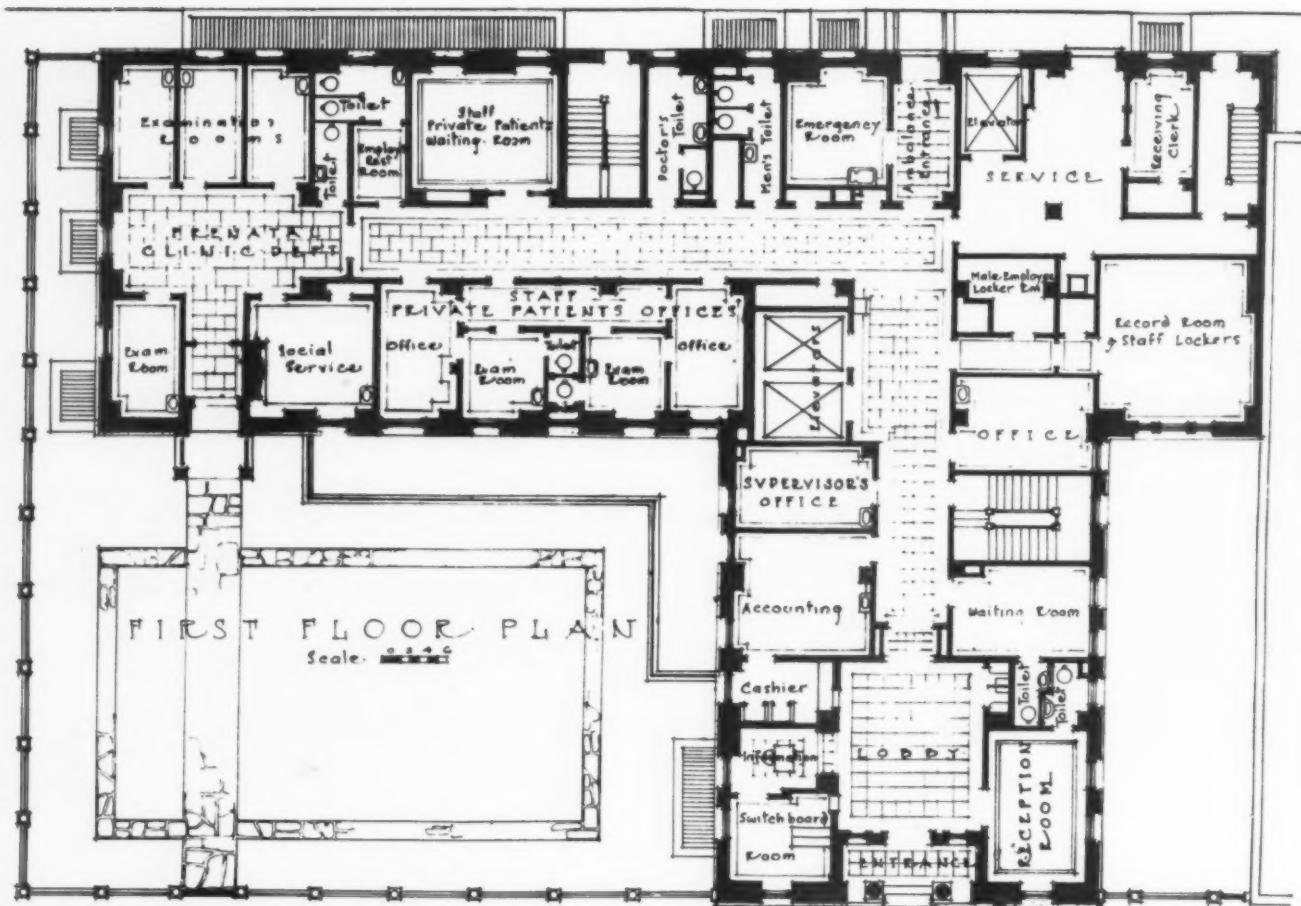


*The exterior of the Woman's Building is dark red brick with marble trim, and the architecture is a modified colonial design.*

from those who have already been delivered.

The fifth floor accommodates twenty-five gynecological patients and four babies. There are seven private rooms and wards ranging from ten beds to smaller rooms having four, three, two and one bed each. Also on this floor is a dining room for the convenience of visitors. Here à-la-carte meals are served. It is used additionally for serving night nurses. Members of the staff also obtain meals there if they are working late at night.

The sixth floor is given over in its entirety to Private Service B patients, usually called semi-private. There are two single rooms, one two-

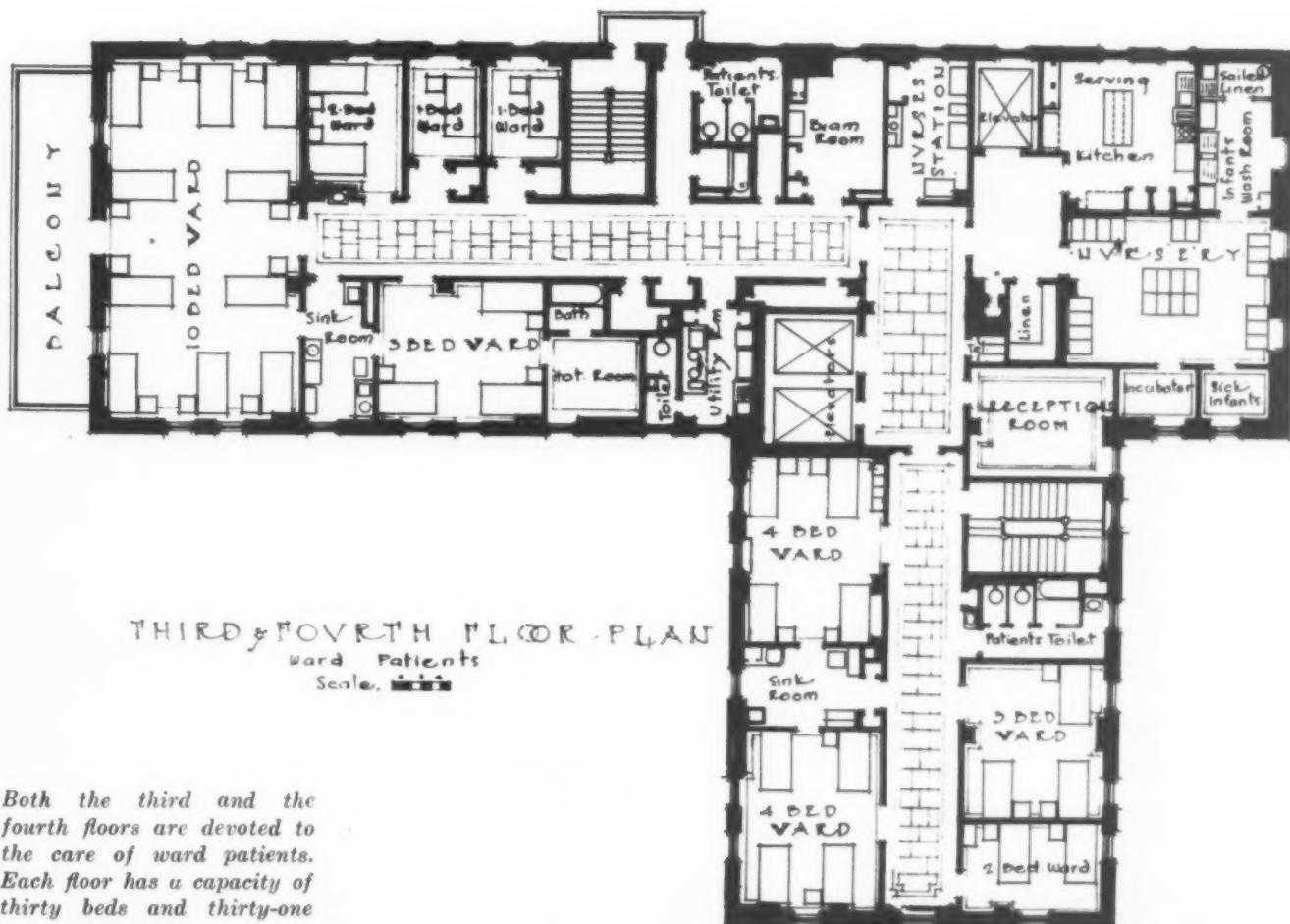


*The prenatal, postnatal and well baby clinics are on the first floor, illustrated above. The floor of the main lobby, shown below, is of black and white marble.*





*The private rooms are pleasingly decorated in soft colors, with chintz draperies, tinted rubber floors, and furniture finished in mahogany, walnut or antique maple.*



bed room, two three-bed rooms and four four-bed rooms. The nursery accommodates twenty-six babies.

The seventh and eighth floors are duplicates and each contains fifteen private rooms and each has a nursery that will accommodate sixteen babies.

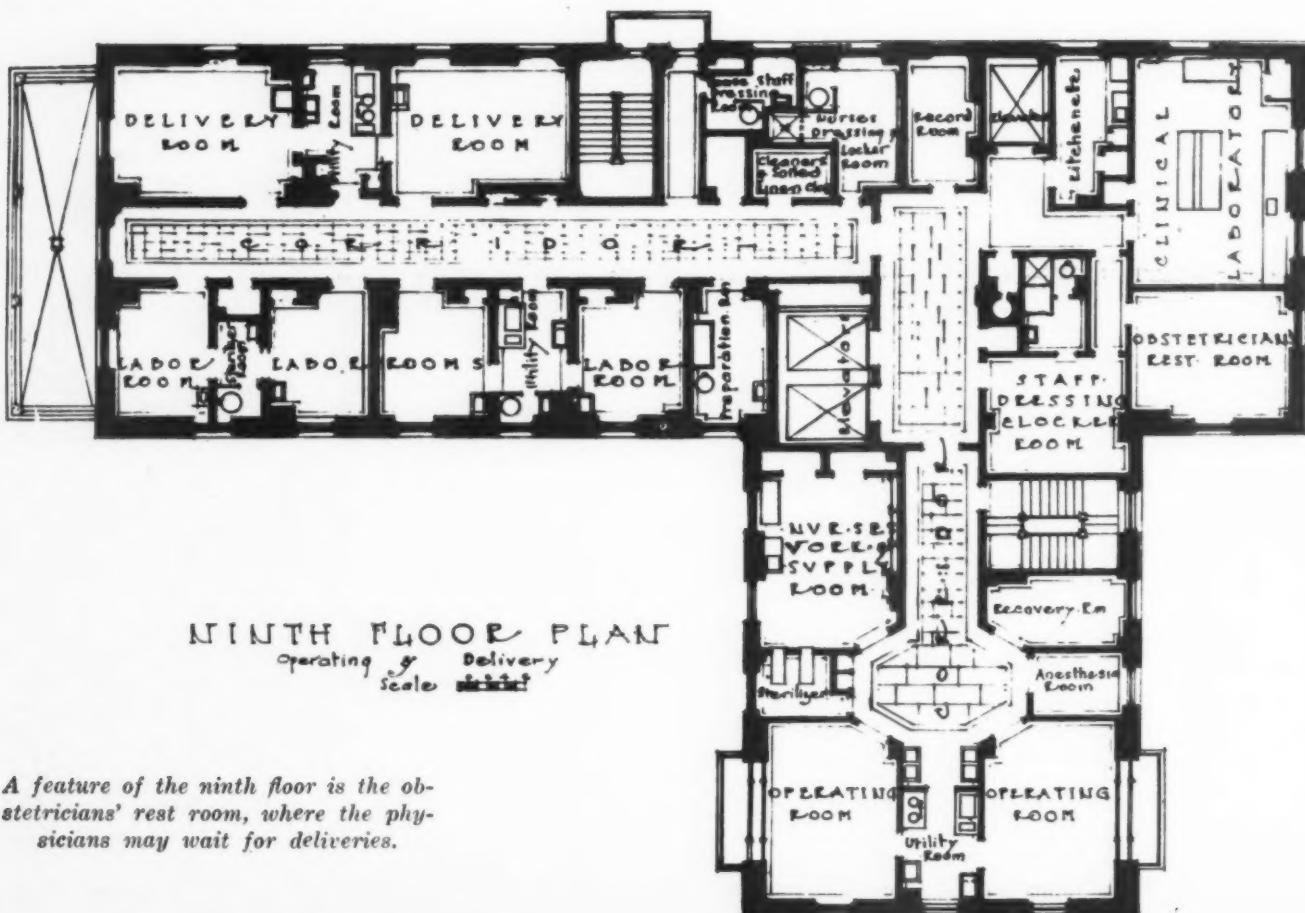
The ninth floor contains two operating rooms, two delivery rooms, two combination delivery and labor rooms, two labor rooms, a clinical laboratory where routine work is done, rooms for the anesthetizing and recovery of operative patients, a nurses' workroom, dressing rooms, and a rest room for obstetricians who are waiting for deliveries. Beds and living room furniture are provided for their comfort. The room adjoins the dressing room where bathing and toilet facilities are available.

A mezzanine floor between the ninth and tenth floors is almost entirely used for service pipes, ventilating ducts and elevator machinery. A part of it further serves as an access to the observation balcony above and to one side of one of the operating rooms. The balcony is separated from the operating room by means of a plate glass partition set at an angle outward, and open at the top so that the operator may be plainly heard while he is explaining his procedure of operation.

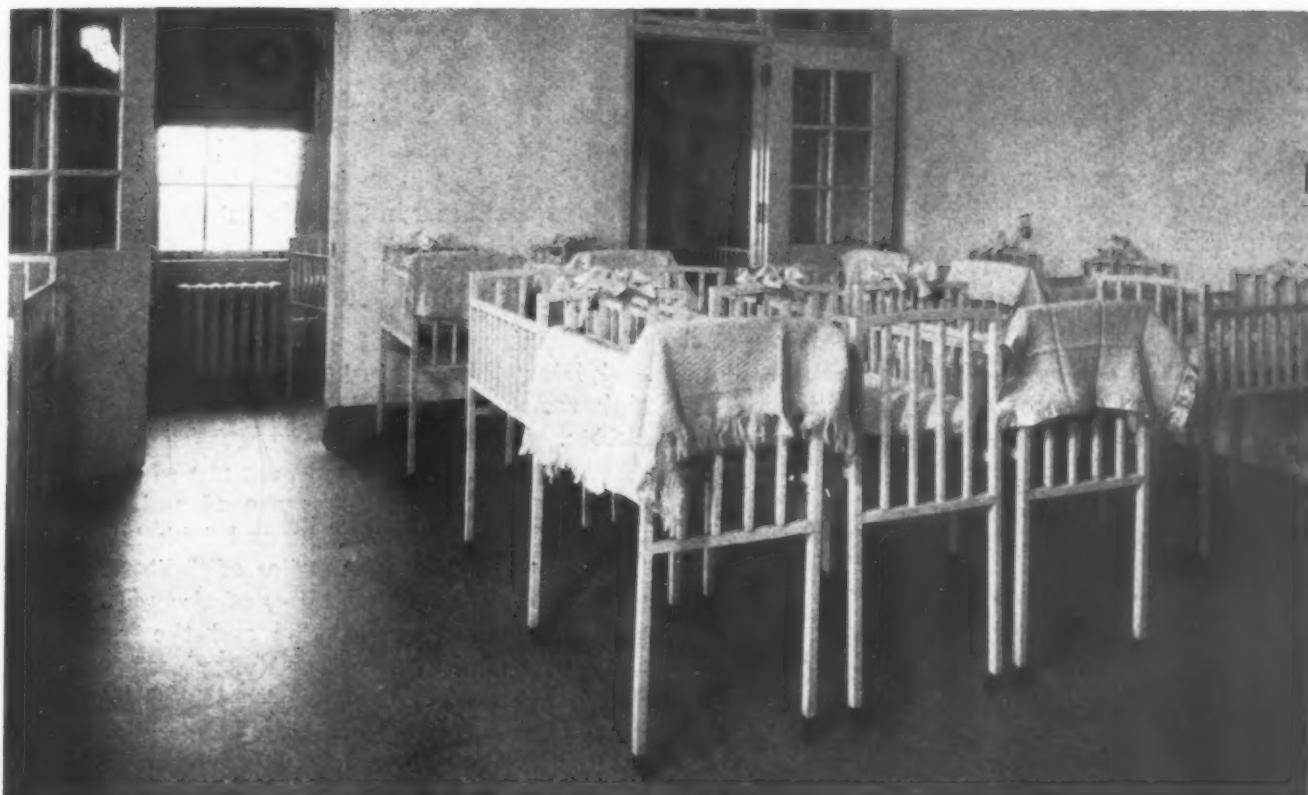
On the tenth floor are two large open roofs, a spacious solarium and a lecture room that accommodates about eighty persons. There also are toilet rooms, an elevator machinery room and a kitchenette.

Each floor above the second, to the eighth inclusive, has a well appointed waiting room for the convenience of relatives and friends of patients. All floors have ice water fountains and telephone pay station booths in the elevator lobby. A mail chute has outlets on all but the tenth floor, and a soiled linen chute that discharges into the basement serves all floors. Two passenger elevators having a car speed of 300 feet per minute and with automatic floor leveling devices, serve all floors and the basement. They are controlled either mechanically or manually. A service elevator for employees and supplies stops at all but the tenth floor.

Every floor has a kitchenette which, in reality, is a service room and may be used for preparing food in emergency cases. A central food and nourishment system is in use, the details of which will be discussed in an early issue of this magazine. Besides the refrigeration plant in the basement which takes care of the main kitchen cold storage boxes, there are two self-refrigerating units on all the floors on which there are patients.



*A feature of the ninth floor is the obstetricians' rest room, where the physicians may wait for deliveries.*



*Nurseries on the private floors are furnished with individual bassinets resembling miniature beds.*

One unit is in the kitchenette for the reception of miscellaneous foodstuffs and of milk for babies; the other and smaller unit is in a small room immediately off one of the utility rooms and it is used for the storage of biologicals, certain medicines and specimens. The main refrigeration plant serves in a dual capacity. Not only does it supply refrigeration for the kitchen cold storage boxes, but it has a capacity of one ton of ice a day, which is crushed and distributed to two specially constructed ice containers on each floor.

On every floor occupied by patients, there are two sink rooms and one utility room. These rooms are fully equipped and are so situated as to afford the maximum of usage with a minimum of travel on the part of the nurses. Each floor also has a linen room and a stretcher room readily accessible from the main corridors. Each of the floors, from the second to the eighth, has an incinerator, a blanket warmer, two bathrooms, a shower room and ample toilet facilities. The seventh and eighth floors have flower storage and cutting rooms, and lounging, locker and toilet facilities for special nurses. The other floors, those occupied by ward and Private Service B patients, have examining rooms in a location similar to that used by special nurses on private floors.

Each floor has its own nursery, the size of which is regulated by the number of adult pa-

tients on the floor and by the service specialty. All the nurseries are removed from the main part of the hospital, access being from the service corridor. The rooms are well lighted, well heated and well ventilated, and the babies are protected from spectators by windows through which the entire nursery may be viewed. Immediately off each of the larger nurseries, but adjacent to them, are two small rooms, one of which is used for sick babies and the other as an incubator room. All nurseries have a wash room replete with the necessary equipment for giving proper care to babies.

Infants with any disease are isolated in the nursery on the second or septic floor, where every facility is available for their treatment. Babies requiring hospital care beyond the time of the mother's hospitalization and those whose mothers are, perforce, gynecological patients are kept in the nursery on the fifth or gynecological floor. Nurseries on the private floors are furnished with individual bassinets that resemble miniature beds, while ward nurseries are equipped with carriages that have a capacity of from three to five bassinets each. Both the private and ward bassinets and carriages have adjustments so that two degrees of elevation for the Trendelenburg position may be had. The ward bassinet carriages are designed to be wheeled into the wards or into the corridors adjacent to the smaller

rooms, where the babies are easily handed to the mothers during the nursing period.

On every floor is a nurses' supervisory station complete with chart holder, rack, desks, supply closet, medicine cabinet with sink, hot and cold water and an ample medicine cabinet having a locked compartment for narcotics and spirits.

Silent automatic electric call systems serve all parts of the building for paging nurses, doctors and officers, and on the first floor, arranged for the convenience of doctors, is an in-and-out panel which registers at the side of the telephone switch board. Distributed throughout the hospital are automatic self-regulating clocks large enough to be read easily.

Throughout the building soft colors have been used, and special emphasis has been given to private room decoration. All windows have shades of a special color compatible with the general color scheme and all windows, except in-service rooms, corridors and basement, have washable mohair or printed glazed chintz hangings. Chintz hangings have been used mainly in private rooms. The woodwork, including doors, on the ward floors, is painted a gray-green and on the semiprivate floor, French gray. Several color schemes have been worked out for the private rooms so that no two rooms adjacent to each other are alike. The large ward floors are of gray rubber, as are also all corridors. In the private rooms, however, the floors, although of rubber, are of different colors.

All ward furniture, except chairs, is of metal, and the same is true of the Private Service B equipment, except bureaus, which are made of wood. The furniture for these two services is painted to match the woodwork in the rooms.

#### *Marble Is Used Extensively*

The private rooms have furniture of three different finishes, depending upon the color scheme. All the equipment is of wood, except the overbed tables. They are metal with rubber tops. The beds, straight chairs, special bedside cabinets, bureaus, and bed chairs are Canadian birch, finished in mahogany, walnut or antique maple. All bureaus have glass tops and the bedside cabinet tops are of rubber. Each room is equipped with an electric fan, a telephone of the European type, wall plug outlets for a standard lamp, a bed lamp and a nurses' call system. There is also an alternating current outlet for power set radios.

Marble and tile have been used extensively throughout the building. The walls, to a height of six and a half feet, in the passenger elevator lobbies from the first to the ninth floors are of special pink marble. The same material is used

the entire length of the corridor wainscoting on the first and ninth floors to a height of five feet eight inches. Clear Belgian black and white Alabama marble is used for the tessellated floor of the main entrance lobby. Gray Tennessee marble is used for the thresholds, the toilet and shower compartments and in the infants' wash room.

#### *Features of the Building*

White glazed tile constitutes the wainscoting of all kitchenettes, infants' wash rooms, kitchen, milk laboratory, clinical laboratory, utility rooms, sink rooms, toilet and bathrooms and cleaners' closets. The walls of all operating and delivery rooms and the emergency room are of mat green semiglazed tile; the floors are of a dark green unglazed tile. The kitchen and milk laboratory floors are of 8 by 12-inch tiles of light green colored slate. The wainscoting of the main stairway, the basement corridor and the tunnel, is composed of large rectangular pieces of light green slate and a border, both top and base, of 6-inch square quarry tile to a height of five and one-half feet. The stair treads are of slate, as is also the floor of basement corridor and tunnel. The remaining floor areas are, in the main, of terrazzo. The floors of the two reception rooms on the first floor are of white oak, in pattern.

All corridor ceilings are arched and acoustically treated, and the main kitchen ceiling, although not arched, has a similar treatment. The ventilating system serves all parts of the building. A special system forces filtered air, taken in from the roof level, to the kitchen. A large duct is provided through which the air is forced from the kitchen to an outlet above the roof. The heating system is automatic and may be regulated to suit the convenience of those persons occupying any unit, small or large.

A pipe tunnel constructed as a part of the service tunnel carries light, heat and power transmitting lines from the main hospital plant. An auxiliary lighting system has been provided for use in emergency, with automatic cut-in equipment installed to ensure uninterrupted service at all times.

The entire building is designed to give efficient, prompt service to women of every economic status.

Knowing that the materials and workmanship entering into the construction of the building and its equipment are of the best available, we can, after watching the building function for the past year, reflect with satisfaction on the fact that the entire program was accomplished through the efforts of the Pennsylvania Hospital organization itself.

# The Hospital and the Dollar

By S. S. GOLDWATER, M.D.  
New York City

THE hospital is a social institution whose true origins are deeply embedded in the human character. It is the response of prudence and of sympathy to man's hatred of suffering and his fear of death. In a less philosophic and more practical sense the hospital rests upon a foundation of dollars, for although the service that the hospital gives to its patients can never be truly measured in terms of money, the volume and the quality of its work are dependent upon its resources.

To the banker or stock speculator all dollars (except Mexican and counterfeit dollars) look alike. The hospital administrator sees differences in dollars that are not visible to the eye of the financier. From his point of view there are plant dollars and maintenance dollars, restricted dollars and unrestricted dollars, dollars earned and dollars donated, undivided dollars of unlimited flexibility and dollars crippled by budgetary allocation. There are surplus dollars and deficit dollars, dollars of normal purchasing power and inflated dollars, doctors' dollars and nurses' dollars, the dollar paid by the patient, the dollar contributed by industry or by its insurers and the dollar of the taxpayer.

It is the purpose of this paper to consider the significance to the hospital of the different types of dollars with which hospital administration is concerned. Variations in the applied value of sums of money that equal each other in the treasurer's report are so great that the hospital superintendent who wishes to succeed must master the history, classification and use of hospital dollars of every variety.

## Par Dollars

Hospitals often, but not always, have reason to be grateful for donations destined for building purposes. Dollars that enable a hospital to replace a dangerous or inadequate building by a modern fireproof structure, suitable for its needs and equipped with labor saving devices, and to shift from the old building to the new without financial embarrassment, are par dollars, whose possessors are fortunate indeed. Less happily situated is the hospital that has thrust upon it a gift of money for a specified building which is

out of all proportion to the hospital's available resources for maintenance. I recall a monumental research laboratory that was presented by a well intentioned donor to a hospital of moderate size, slender means and no particular scientific pretensions. For many years a small corner of the laboratory building was occupied by a rather depressed and forlorn director who lacked the technical assistants and supplies to carry out any one of the many ambitious research projects he was capable of formulating. This hospital, with its awkward laboratory appendage, always reminded me of a small dog with a big tin can uncomfortably fastened to its tail. This single example suffices to show that the building dollar was not meant to live alone. Its single state is not a state of blessedness, and only when joined to its natural mate, the maintenance dollar, has it a chance of attaining a complete and satisfied existence.

## *An Asset or a Liability?*

The hospital dollar to which the donor attaches a stout hampering string may be either an asset or a liability. When the restricted dollar is dedicated to a genuine need, clearly perceived, accurately measured and permanent in character, it may be a great blessing, but one often wonders whether it is safe to assume either the permanence or the unchanged relative value of any hospital activity, however evident at the moment. If such an assumption is unsafe, the benefactors of hospitals should be warned of the hazardous character of restricted donations. The trustees of 1950 or 1970 are far more likely to gauge accurately the hospital needs of their own day than the philanthropist who creates a hospital fund to-day. A generous impulse or a generous gift is in itself insufficient to ensure the best results where hospitals are concerned. If to the meat of generosity there is not added the salt of faith in the honesty and judgment of future boards and executives, the hospital will scarcely be able to sit down to its meal of dollars with a hearty appetite.

Throughout the report of a hospital that last year earned the entire cost of its maintenance there runs a complacent note which seems to

imply that for hospital purposes an earned dollar is more virtuous than a donated dollar. The earned dollar is indeed entitled to be treated with respect, but if its importance is sometimes underestimated by the hospital that entertains private room patients at rates below cost or that does not take the trouble to verify the need of a patient who applies for free treatment, its merit is sometimes sadly overestimated by other hospitals that insist upon a balanced budget regardless of the demands of scientific diagnosis, of adequate nursing care, or of the financial distress and physical suffering of the poor.

#### *Deficits Are Sometimes Honorable*

To place the earned dollar upon the footing finance assigns to it in a purely business enterprise is to cut the heart out of hospital work and to transform it from an expression of the kindlier impulses of civilized man into a cold-blooded affair of business. No hospital should strive to create a deficit, but what hospital can avoid working toward an honorable deficit without refusing to aid the needy? Hospital deficits are disgraceful only when they can be traced to bad management, and surpluses are creditable only when the hospital is fortunate enough to find money remaining in its pocket after it has accomplished its life-saving task with that combination of business sense and uncalculating generosity, which is its privilege and duty to exercise.

Who has not been fascinated by diagrams in which the annual expenditures of a hospital are represented in their totality by a circular dollar which is cut up into unequal wedge shaped portions like so many pieces of pumpkin pie? The hospital that systematically analyzes its needs and tries to apportion its available cash justly has taken a long step toward sound business administration, yet the budgetary subdivision of the hospital dollar is not without its darker side. A new remedy as important, for example, as insulin may make its appearance without warning in the middle of a fiscal year, when it cannot be paid for out of the budgetary allotment of the drug department. A prosperous industrial city needing little free ward service may experience a sudden business depression resulting in an unprecedented and entirely unexpected demand for free hospital days. All sorts of squalls may be encountered in the year, and the hospital administrator who is obliged to steer his ship through perilous waters may be excused if he sometimes rebels against a budgetary system that does not give him the opportunity to adjust his course to changing winds and weather.

The medical needs of a hospital, its nursing needs and the needs of its social service department can never be prophesied with the mathematical accuracy that the budgetary system assumes to be a normal attribute of the ordinary administrative mind. Hospital department heads who get into difficulties that are not of their own making often feel that the budget system is bad for individual departments, however reassuring it may be to the treasurer. When special board committees, composed of humane individuals, are in close contact with individual hospital departments one often finds them draining their private purses to meet legitimate and pressing needs for which an economical budget committee of the hospital failed to provide.

Hospitals should not be expected to avoid the effects of economic laws that affect other consumers. A decline in the purchasing power of the dollar brings trouble to the hospital as it does to every one whose income cannot be promptly adjusted to the new conditions. The citizen who as householder knows only too well the meaning of an inflated dollar may, as patient, protest against the rising price of hospital service. Economists have suggested the creation of a standard commodity dollar of stable purchasing power as a cure for the embarrassing fluctuations of the deceptive dollar with which hospitals and all of us are obliged, under the present monetary system, to contend. If it were possible to create a dollar of uniform and unchanging goods value one of the great difficulties of hospital financing would disappear.

#### *Hospital and Hotel Service Not Comparable*

The patient's dollar is one that looks much larger to the payer than to the payee. The average hospital patient has little conception of the cost of modern hospital service, of the wide range of activities that it includes or of the materials that it necessarily consumes. There is no excuse except ignorance or thoughtlessness for the common comparison of the cost of complex hospital service with that of the far simpler service of a hotel. An inquiry lately made by the Committee on the Cost of Medical Care concerning the types of available hospital accommodations disclosed in 259 hospitals a total of 363 private rooms listed at less than \$3 a day, and 5,005 private rooms listed at prices under \$5. Scattered among 238 hospitals reporting semiprivate accommodations there were 9,426 beds for which the hospitals charged only from \$3 to \$5 a day, and 1,770 beds at less than \$3.

How many of the patients who pay these modest rates realize that their dollars fall far short

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of maintaining the service whose benefits they enjoy? Hospitals are, in fact, often required to supplement the dollar of the semiprivate patient (sometimes even of the private patient, and for this there is little excuse) by indirect donations that are neither declared nor acknowledged. On the other hand, hospitals that ambitiously aim to supplement ordinary medical care by careful clinical research sometimes use part of the patient's dollar in ways of which the patient is unaware and of which he might not approve. This happens, for example, when the discharge of a paying patient is delayed for no other reason than to complete scientific observations that confer no immediate benefit upon the observed patient, whatever their value may be to the many patients of the future.

*The Rôle of the Taxpayer's Dollar*

The "compensation" dollar is one over which there has been and still is much acrimonious discussion. Workmen's compensation laws imply the creation of insurance funds adequate to defray the full cost of the medical care of the victims of industrial accidents (in some localities of industrial diseases also), yet the niggardly policy of insurance companies and the arbitrary and unjust decisions of public officials often compel hospitals to share such expenses. For a time hospitals accepted this burden without much protest, but during the past two or three years hospital associations in many localities have protested vigorously against the injustice of thrusting upon them burdens that properly belong to the companies that underwrite compensation insurance.

Since more than half of the 800,000 hospital patients in the country are cared for in hospitals supported by federal, state and local governments, it is evident that the taxpayer's dollar plays a leading rôle in the American system of hospital finance. These figures, however, do not tell the whole story of the taxpayer's dollar in its relation to hospitals. Large public contributions are modestly concealed behind a system of tax exemption from which thousands of hospitals benefit. In another and more visible manner the dollar of the taxpayer is found functioning among private hospitals that undertake to care for indigent patients. In New York City, for example, in 1928, fifty-seven hospitals connected with the United Hospital Fund reported the receipt of nearly \$900,000 as the city's contribution toward the maintenance of free ward patients. While such contributions are welcomed by private hospitals, the rates of city or state pay that prevail in many localities are far from ade-

quate or equitable. If a local government first acknowledges its responsibility for the support of indigent patients and then restricts its hospital payments to a fraction of the actual cost of maintenance, it is a question whether the taxpayer's dollar is not being used to levy tribute upon, rather than to lighten the load of, the cooperating private hospital.

The story of the hospital dollar would hardly be complete without some reference to the doctor's and the nurse's dollar. The "dollar a year" man was a hospital physician or a hospital trustee long before he made his first patriotic appearance in government circles. The annual report of a typical hospital of 300 beds to which a large dispensary is attached shows that the institution employs nearly 200 physicians as consultants, visiting physicians, visiting surgeons, laboratory workers, clinical assistants and interns. The hospital's annual budget is more than \$600,000, of which only \$30,000 is devoted to professional services. What does this mean?

Last year 18,000 patients made 60,000 visits to the out-patient department of this institution. At each visit a patient was seen by at least one member of the staff. All of this service was given gratuitously. Suppose this service were not free and the doctors demanded for each consultation a modest fee of \$3; then the cost of medical service in the out-patient department of this hospital would have amounted to \$180,000.

*What the Medical Staff Contributes*

Of 300 beds in the hospital proper, 180 are in public wards. Here unsalaried interns are in constant attendance, and ward rounds are made every day by members of the visiting staff. All of the ward beds are not occupied every day in the year, but there is sufficient occupancy to aggregate a total during the year of 50,000 free ward days. Suppose we arbitrarily attach to this service, which includes not only the bedside visits of the visiting staff and interns but complete laboratory service and more than 2,500 major surgical operations, a value of only \$10 for each hospital day. Such an estimate gives \$500,000 as the value of the service contributed by the staff. While some members of a hospital staff derive either professional or pecuniary advantages from their hospital connection, this is not true of all, and only a few members of the staff, chiefly full-time workers in the laboratory departments, are directly paid for their hospital work. We find then, that although this typical American hospital paid its medical staff only \$30,000, the value of the service rendered by doctors to ward

and dispensary patients, conservatively estimated, was \$680,000. Since this is a story of dollars, I desist from any attempt to describe in terms of human life and human happiness the real significance of the service of which the foregoing figures are merely an index.

#### *Nurses' Pension Funds Are Needed*

In most hospitals nurses as well as doctors give a great deal more than they receive. In a few hospitals student nurses pay fees for their tuition. In others, tuition and maintenance are regarded as a *quid pro quo* for the 2,800 hours of bedside work that each student nurse gives to the hospital in the course of the year. In a third group of hospitals, fees ranging from \$100 to \$300 per annum are granted to each student (the higher figure is rarely offered by well established schools). The hospital nursing staff includes graduate as well as undergraduate nurses, and the pay of graduate nurses, who are employed by the month, is not large—say from \$75 to \$125 a month with maintenance. Graduate nurses on special duty, employed in hospitals by the day, earn \$6 or \$7 a day, but their employment is irregular and as they have a certain social position to maintain, their living expenses are relatively high. Is it surprising, then, that efforts are being made to create nurses' pension funds? The need of retirement funds is especially felt by hospitals that have been graduating nurses for twenty-five years or more.

#### *Ratio of Nurses to Patients Doubled in 20 Years*

Hospital work constantly grows more intense. The ratio of nurses to patients in most hospitals has doubled in twenty years. Part of this increase has been for the benefit of patients, part for the benefit of student nurses, who, in the better hospitals, now work eight hours a day instead of the ten or twelve hours the older working schedules required. Many hospital dollars are devoted to the teaching of student nurses, to the housing and maintenance of students and graduates and to their care in illness, but nurses do not grow rich at the hospital's expense.

We are often told that American civilization is a dollar civilization. If it is, hospital records show that a considerable share of the nation's dollars (more than a billion and a half each year) is devoted to uses of which any civilization worthy of the name might be proud. Yet the needs of hospitals are never fully met, and it is to be hoped that a better understanding of the uses that hospitals make of their money will encourage more generous and more intelligent giving.

#### **Hospitalization Plans for the Man With the Modest Income**

To meet the needs of some 3,500,000 New Yorkers who are neither rich nor poor, a number of plans are afoot to provide for their hospitalization at a moderate cost, according to the *Survey Graphic*.

Lenox Hill Hospital is putting up a new building which will give at first eighty and eventually 150 beds in semiprivate rooms at from \$4 to \$6 a day, including group nursing. This represents a saving of \$175 for the average two-week hospital stay over the present cost of a private room and private nursing.

St. Mark's hospital has announced a "private group" plan, with two, three or at most four patients in a room, and charges midway between ward and private room rates. When special nursing is required, it is available on a group plan. Physicians who treat patients in these rooms agree to charge not more than \$100 for the complete medical and surgical care of any case.

The new Gotham Hospital, projected by the Women's Medical Association, is to be organized especially to meet the needs of patients whose incomes are moderate—from \$2,000 to \$7,500. The hospital will have fifty private rooms averaging \$10 a day for patients who can afford to pay full cost or more. It will have another fifty private rooms at \$5 a day; fifty beds in semiprivate rooms (two beds to a room) at \$4 a day, and fifty beds in small wards of six beds each at \$3 a day. There will be no free beds, since it is believed that the needs of charity patients are met by the wards of the public and private hospitals of the city.

To assist in making up the loss that will be incurred by the hospital, there is being sought a patients' endowment of \$3,000,000. The cost of building and equipping the hospital will also be \$3,000,000. For patients who share in the endowment benefits, the fees charged by the physician and surgeon will be fixed and collected by the hospital, according to a definite schedule, graded in proportion to the type of hospital service. There will be a fixed fee for hospital extras. All nurses, general and special, will be graduates employed at an annual salary.

#### **Patients Complain at Lack of Night Nurses**

One of the outstanding complaints that patients make about their care in the hospital is the lack of a sufficient number of nurses at night, says the *Western Hospital and Nurses' Review*.

"Is this a fault that is common to the majority of hospitals? If the complaints of discharged patients are to be regarded, it is," the article says.

"Patients also complain that they are given their supper so early in the afternoon and are prepared for the night so early that by the time they are ready to sleep, the whole process of preparation is needed over again, and the nurse on duty cannot take care of their needs.

"Perhaps it is felt that the patients should be educated to make their demands early in the evening. It may be possible to do this with patients who are in the institution over a long period, but the majority of patients are constantly changing. Time seems twice as long at night to wait to have a light answered—the patient becomes apprehensive or frightened and more often than not, angry. They feel they are being sacrificed to a hospital system."

# Are Your Death Records Correct?

By HAROLD B. WOOD, M.D., Dr.P.H.

Epidemiologist, Pennsylvania Department of Health, Harrisburg

**D**EATH records are among the most valuable records kept by hospitals in spite of the scant attention they are given by some institutions.

It is important that hospital authorities give the utmost care in producing complete, accurate and correct death records for these reasons: Certified copies of about half of the death certificates are needed for legal purposes; deaths must be reported and classified according to an internationally devised system; statements on death certificates are accepted in court unless proved incorrect; the law provides for the prosecution of any person who gives incorrect information on a death certificate; frequently the collection of insurance with which hospital bills are to be paid depends upon the accuracy of the statements on record; incorrect death certificates may be used in litigation against hospitals. Also, hospitals are many times put to much trouble to correct the mistakes they have made upon their death certificates.

The responsibility for accuracy and completeness in death certificates rests with the hospital authorities. The head of a hospital is the superintendent; it is he, therefore, who should provide for the proper filling out of death certificates. Whether the actual work is done by a nurse, an office clerk, an intern or a member of the staff is of little consequence if it is complete, proper, accurate and legal. The data concerning the dates of attendance and the cause of death must be in the handwriting of the doctor, who signs what he has written. The name of the informant should be his or her signature.

## *The Cause of Many Errors*

In most instances, misunderstanding accounts for the errors and omissions on death certificates. Since medical students receive little or no instruction on such detailed work as writing death certificates, upon their becoming interns they do not know what is required of them. All these omissions and inaccurate commissions are readily correctible if the hospital superintendents will spend a little more time on these important records.

A few ideas concerning the requirements of death certificates are given here. These are

formulated from the errors most frequently found on death certificates.

The name of the hospital must be on every death certificate of a person who dies within the institution or in the ambulance *en route* to it. The death certificate must show the home address of the patient. The home address of the informant does not necessarily give the residential address of the patient and is not sufficient. The personal data about the patient must be as complete and as accurate as possible. Frequently the age is omitted and it is always possible to approximate the age by a guess when accurate information cannot be obtained.

## *Filling in the Certificate*

The two dates of attendance, when treatment was begun and ended, should begin with the date the patient was admitted to the hospital or institution and came under hospital supervision and care, irrespective of whether the patient then had the particular disease of which he died. This admission date will definitely indicate whether the fatal illness was developed or contracted while in the institution.

The time of duration asked on the death certificate refers to the duration of the disease and not of the treatment; yet in a large proportion of cases the physician misunderstands the question and makes the time of duration equal to the difference in days between the dates when treatment was begun and ended.

The questions as to whether an operation or autopsy was performed must always be answered, although it may be obvious that neither was done. The question asking about an operation refers to any operation performed at any time for any disease or condition having a direct connection with the cause of death. If an operation was done, the date must be given as well as the disease or condition. If these data are not definitely stated, the certificate will later be returned so that corrections and more complete and detailed information may be given.

The cause of death is the most important information recorded on death certificates and also the one most inaccurately or incompletely given. It must be recorded fully but it should not be a complete autopsic report. Heart disease should

not be recorded as a chief cause or contributing cause of death unless it has played an important rôle. If the heart simply gives way under the strain of some other disease, no mention should be made of it. Chronic heart disease should be given as a cause of death only when it is the primary cause and not a complication. Undoubtedly one of the great factors in placing heart disease as the greatest cause of death is the improper mention of the affection in conjunction with such other conditions, such as apoplexy, intestinal obstruction, bronchopneumonia and alcoholism. The wilfully dishonest recording of heart disease as a cause of death and the superficial snap conclusions in many cases help to swell the records of casualties resulting from heart disease.

Many of the other principal errors that are made in recording the causes of death may be obviated if the following rules are accurately observed:

Acute heart disease and acute nephritis are usually complications of other conditions that must be fully detailed on the certificates. This is also true, usually, of bronchopneumonia in children. When pneumonia follows measles, whooping cough or any other infection this previous infection must be recorded as the primary disease. The cause of a peritonitis, of a septicemia, of a meningitis, of a hemorrhage, of a poisoning, of an abscess or of an accident must be given. With meningitis the name of the bacteria that probably caused the infection must be specified, or the name of the disease that the meningitis followed. The record must show why an operation was performed, the definite disease or involvement in gall bladder disease, the primary location in a malignant disease, whether pelvic infection was gonorrhreal or not, what kind of tumor existed and what organ was definitely involved. It must state whether accidents connected with mining were in the mine or outside, exactly how the accidents occurred and whether deaths by any violence were accidental, homicidal or suicidal.

#### *Rules Should Be Posted*

Certificates for deaths from burns must state whether or not they were due to a conflagration, that is, from a house afire, and they should specify how the burns were received. In case of a fall it must be specified how the person came to fall and from what he fell. In all railroad accidents it must be stated where the person had been when he was killed and whether he was a passenger or was crossing the tracks. In automobile accidents it must be stated exactly how the accident

occurred and what the automobile struck or was struck by. If a man dies from a fracture or some other injury, the death certificate must state exactly the manner in which the injury was received.

These simple rules cover most of the instances in which errors occur in the records of the causes of death. They should be copied by each hospital and be posted where they may be seen. Persons who are concerned in writing death certificates should, for the convenience of all concerned, familiarize themselves with the directions that are printed on the back and at the edge of death certificates.

Whenever the cause of death as written on the death certificate is not fully explained, as suggested in these requirements, the return of the certificate for complete and accurate information may be expected.

Hospital authorities must not neglect to report to the proper local authorities all cases of reportable disease, irrespective of how long the patient was in the hospital or when the diagnosis was made. A checking of death certificates reveals a common neglect by hospitals of this important and obligatory duty.

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## Working Out a System for Increasing the Number of Autopsies

Why is it that so few deaths come to the autopsy table? asks Maurice Dubin, superintendent, Mt. Sinai Hospital, Chicago, in the *Bulletin of the American College of Surgeons*. Less than 7 per cent of the deaths occurring in this country are made the subject of pathological analysis, he says.

Mr. Dubin feels that this condition can be changed only by the hospital's working out a systematic plan of organization for the express purpose of increasing its percentage of autopsies. Steps in this plan would be as follows:

1. To see that a medical staff and hospital consciousness of the importance and desire for autopsies is created, evidencing itself by assisting in setting up proper machinery for securing consents, and providing proper facilities.

2. To see that a pathologist is appointed with sufficient ability, desire and time to perform autopsies properly and promptly and to prepare reports and material for presentation to the staff.

3. To arrange with one definite person, chief resident physician or other administrative assistant, whose duties bring him in contact with patients and their relatives, to make requests in all cases of death in the hospital for permission to examine the body of the deceased with the object of ascertaining the true cause of death.

4. To see that, for both the efficiency of the person performing the task and the recognition of its difficulties to be properly visualized, a method of a monthly recording of the achievement be instituted in all hospitals performing autopsies.

# How to Organize a Hospital Library\*

By ADELIN M. MACRUM

Librarian, Tuberculosis League of Pittsburgh, Pittsburgh

THE hospital library usually has a twofold function: It is a medical collection for the use of resident and visiting physicians, interns, students, nurses and the administrative staff, and it is a collection of books for the patients.

While a large hospital may wish to keep these two divisions distinct, with a medical librarian in charge of one and a general librarian in charge of

the other, it appears to me to be to the advantage of both to combine them under the one term, "library," and to have the same person in charge of both, with specialized assistants to carry on the different work required by each department.

A basic reason why such an arrangement is to the advantage of the patients' library is that while medical libraries have a family tree hoary with age, going back to Babylonian clay tablets and to the more modern Alexandrian libraries in Egypt, which the Ptolemies organized and built

\*Address delivered to students at the Carnegie Library Training School for Librarians, March 8, 1930.

A tuberculous patient who is able to take exercise is assisted by an assistant librarian and makes the daily rounds with the book truck, from which patients may choose magazines or books.



up, the patients' libraries in this country before the World War could be counted on the fingers of one hand. While medical directors and hospital superintendents realize the value of the medical library, any organized system of providing books for patients is often frowned upon as an unnecessary expense and an innovation of doubtful worth. The medical librarian is their trusted friend and ally. She has helped them write their medical papers, has looked up new lines of medical research and has brought to their attention at just the right moment certain points in treatment or in the differential diagnosis of a puzzling case. She understands their technical jargon. In a word, she is one of themselves. And when she explains that under her care, books can acquire a definite therapeutic value and that she has in stock "tonics and sedatives, alteratives and roborants, antispasmodics, analgesics, salves and balms of all sorts—compounded by experts and warranted to work,"<sup>1</sup> they will often give her a free hand accorded to no outsider.

Since in the smaller hospital the medical library is almost sure to be under the same direction as the patients' collection, I shall briefly outline its organization and management and give some references for further study.

The medical library consists chiefly of four kinds of material—medical journals, which predominate both numerically and in the amount allotted them in the budget; textbooks; pamphlets and monographs; society transactions and hospital reports. Each library soon develops an individuality and adds its particular side lines and its specialized collections, but these four types of material form the basis of all medical libraries.

#### Classifying the Books

The Dewey decimal system of classification is not suited to medical libraries. This can be readily understood when we consider that the Dewey system is designed to cover all the fields of human thought and endeavor, of which medicine is but a small part. But medicine, when considered alone, is such an immense field and calls for so many subdivisions that with Dewey to guide us we should soon be lost in a maze of decimal points and figures of bewildering length. It is better, therefore, to choose a system specially designed for medicine, and I recommend either the classification of the United States Surgeon-General's Library, or the one officially adopted by the Medical Library Association which is the Boston Medical Library classification. An account of the first will be found in the *Bulletin of the Medical Li-*

*brary Association* (N. S. Vol. 6, No. 4, April, 1917, Classification and Arrangement of Books in the Library of the Surgeon-General's Office, by C. C. McCulloch, M.D., librarian, Surgeon-General's Office). In the same volume of the periodical, on pages 25 to 38, will be found a description by the same man of this important medical library, the first and largest in this country and the second in size in the world. The largest and oldest is, I believe, that of the faculty of medicine at Paris.

#### The Boston Classification

An account of the Boston classification will be found in the *Bulletin of the Medical Library Association* (N. S. Vol. 7, 1918, pp. 33 to 63). Since the national adoption of this scheme, certain amplifications of special subjects have been elaborated by librarians in those specialties, for example, one on dentistry, one on hospitals and nursing and one on tuberculosis. These are now included in the appendix to the classification as issued in reprint form by the Boston Medical Library.

For cataloguing, the Library of Congress cards may be used as far as possible, but because of reprint material and the necessity of adding immediately to the catalogue certain outstanding periodical articles many additional cards will have to be typed. The latest edition of the U. S. Surgeon-General's catalogue should be used for subject headings, the medical director being consulted for the terms preferred by the hospital.

The most important reference books are the voluminous index catalogue of the Surgeon-General's Office, the Index Medicus and the Quarterly Cumulative Index of the American Medical Association. The last two have recently been combined into the Quarterly Cumulative Index Medicus. Many of the specialties have their own reviewing and abstracting journals. Package libraries of references on certain subjects are lent to members by organizations, such as the American Medical Association and the American College of Surgeons. The Hospital Library and Service Bureau, now managed by the American Hospital Association, at 18 East Division Street, Chicago, offers free to all hospitals and public health workers the use of its thousands of package libraries and bibliographies. The medical librarian will find many such aids at her disposal. She should have instant access to the best and latest medical dictionary, to an unabridged dictionary, to French, German, Spanish and Italian dictionaries and to a recently published encyclopedia. The American Medical Association directory and similar reference volumes are indispensable.

<sup>1</sup> Jones, E. K., What Can I Find to Read Aloud? *The Hospital Library*, p. 70, American Library Association, 1923.

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The periodicals will not have to be classified, but may be arranged in a straight alphabetical file. Some libraries file their foreign magazines separately, but I see no reason for doing so. The pamphlets on hand are so numerous that it is a waste of time to catalogue any except those of outstanding value. The best way of cataloguing pamphlets appears to be to assign a class number to them as they come in and have a card in the catalogue covering the whole group. For instance, 11-S is the Boston number for influenza.

ieties embracing two or more special fields should be put in a special place, such as is provided in the Boston system under 42, Publications of Societies and Institutions, under which they can be arranged alphabetically. Hospital reports can also be grouped alphabetically under 39, Boston system. Attempts to elaborate subdivisions for this material only create confusion.

Simplicity is the keynote of a successful charging system, as doctors are intolerant of red tape in any line but their own. Let each book, pe-



*During the noon hour, patients and staff share the library of the Tuberculosis League of Pittsburgh. At other times it is reserved for the staff.*

At the end of your influenza references, have a card saying, "Influenza, see also pamphlet file 11-S." These pamphlets should be sorted, say every three years, and material then considered of permanent value should be catalogued as books and useless pamphlets should be discarded.

Society transactions and hospital reports cover such a wide range of subjects that they are hard to classify. Those covering only a special field, such as the heart, tuberculosis or cancer, could of course be assigned those class numbers and could be filed in the general section for that subject. All transactions of general societies or so-

riodical or pamphlet have attached to it by a clip or in a pocket when possible a card giving author, title and call number, with lines for date borrowed and the borrower's signature. Library Bureau pocket No. 1167 and card 1152 are excellent for this purpose.

The address of each borrower should be added to his name unless he is a resident at the hospital or is personally known to the librarian. The date the book is due may be stamped on the back flyleaf as a reminder to the borrower. The cards may be filed by author, or by a combination under date and author.

McLean Hospital, Waverley, Mass., a private institution for the treatment of mental diseases, claims the honor of being the first hospital to realize the therapeutic value of books. In 1904 it reorganized its library under the direction of Edith Kathleen Jones who has stated that the basic principles governing the organization and administration of hospital libraries are: first, an organized central library, as charming and homelike as it can be made; second, a librarian with personality, knowledge of books and library technique; third, an annual appropriation sufficient for the purchase of new books as they are published; fourth, the exclusion of morbid, gruesome and unwholesome literature.

#### *How Hospital Libraries Were Begun*

The year 1904 is the red-letter year for hospital libraries. During this year, the Massachusetts General Hospital, Boston, reorganized its patients' library, secured a librarian and was the first general hospital to give its patients regular book service. In 1904, the Iowa plan also was born. On visiting a hospital for the mentally ill and noting the lack of entertainment for the inmates, Alice S. Tyler, secretary of the Iowa Library Commission, formulated a plan for providing state institutions with books. Other states quickly fell in line, usually under a group system. This means that a trained library organizer centrally located selects and catalogues the books and then circulates traveling libraries. The organizer trains a local person to administer each institutional library under her periodical inspection.

Apart from these pioneers, there was little activity in the hospital library field until after the war hospital service of the American Library Association had demonstrated to doctors, nurses and civilians the important part that books can play in hastening the recovery of hospital patients. The U. S. Veterans' Bureau has taken over and continued this service in the government hospitals for exservice men, and more and more civilian hospitals have seen the light and either give or are preparing to give this service to their clientele.

Modern views on psychology are largely responsible for the more friendly attitude of hospital authorities toward books. Hospitals must move with the times, and as soon as the doctors realize that there is a definite relation between contentment of mind in a restless patient and the reading of a good book, that books help in psychologic adjustments and that some are as sleep inducing as a powder, then this additional therapeutic tool will be eagerly sought. The educational value of the reading done by patients with chronic diseases

who are undergoing long institutional treatment is easily understood. Books bring many opportunities for aiding with occupational therapy work and for giving prevocational training to those who must learn new work because of their disability.

Hospital libraries are organized under one of two systems, the unit system, under which the library is owned and operated entirely by the hospital, or the group system, under which a state, a county or a city accepts a joint arrangement under the previously mentioned Iowa plan. Under this group system also falls the arrangement between a hospital or several hospitals and the local public library. The first arrangement is the best but it is also the most expensive. Small hospitals often cannot finance a library. Many larger ones are not yet entirely persuaded that the expense is justified. In any case, half a loaf is better than no bread, and much first-class library service is being given by volunteer and outside agencies.

In addition to the usual library technique, the hospital librarian must possess tact, a real liking and sympathy for sick people and a knowledge of books. She is not the monarch of all she surveys, like the head of a public library or a branch librarian, she is only the head of one department in a large organization. She must know the hospital rules and honor them. She must plan her service so that it may fit in with other hospital routine. If there are conflicts, she must be the first to give way and to seek other times or other means for giving her services. On the other hand, she must not be spineless or develop an apologetic attitude if she wants the library to succeed. Her work is recreational, educational and therapeutic, and it is her duty to see that the last phase particularly is kept to the fore in the minds of the medical and nursing staff.

#### *Locating the Library*

The library should be centrally located, easy of access for ambulant patients and large enough to allow for growth. It should be an airy, comfortable, cheerful room with plenty of character and individuality. The walls should be lined with a good type of shelving. Chairs, tables and lamps should be chosen with comfort and beauty as well as utility in mind. Let this be a spot where the patients can get away for a little from the regular hospital atmosphere.

If the medical library is housed in the same room, it will probably be necessary to have a library hour, when patients may use the room, and to reserve it at other times for quiet study for the medical and nursing staff. For this reason,

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when it is possible to have two adjoining rooms it is better to separate the libraries. It is not desirable for the patients to look over the titles of medical books and take peeps inside, to their own horrified fascination. Needless to say, medical books are never issued to a patient unless he has had previous medical training.

*Different Types of Book Trucks Available*

An important library accessory is the book truck, or a fleet of trucks if the size of the hospital warrants it. One of the best trucks, costing \$48, is metal and has soundless tires. It accommodates from sixty to seventy-five books on its five shelves, which are so slanted that they can be examined by a person in bed without effort. Two flat trays for magazines are in the back. There is also an American Library Association hospital book truck that is very serviceable.

The librarian should endeavor to have her library provided for on the regular hospital budget and not let it be altogether a "charity child." Gifts of course are always acceptable, both in the medical and in the patients' collections, but without a definite budget as a basis, there can be little planning or method in the library. She should not worry too much over monetary insufficiencies. I have run a patients' library for over a year on nothing but faith, so I know it can be done. With skill in begging, the librarian can always increase her collection at the expense of those more fortunate in this world's goods.

A simplified Dewey classification may be used for cataloguing nonfiction, with Cutter author numbers. The fiction should be arranged alphabetically, by author, and a dictionary catalogue prepared, with a title and author file for fiction, and a subject and author file for nonfiction. A shelf list is unnecessary. An accession book should be kept. For charging records the system described under the medical library will do very well. In my small library we dispense with stamping the date due on the flyleaf, as the cards are gone over every two weeks to list overdues. In addition to having the borrower sign his own name, it is well to add his ward number and, if he is a staff member, the abbreviated title for doctor, nurse, dietitian or social service worker.

Ambulant patients should be encouraged to come to the library during library hours. They will enjoy a wider choice of books, and this practice will enable the librarian to become better acquainted with them and to suggest lines of reading or courses of study. For bed patients, a schedule for the book truck should be arranged with the hospital superintendent and the superintendent of nurses. At the beginning of each

visit, the head nurse of each ward should be consulted to learn whether there are any patients who must not be disturbed. Private rooms should not be entered without consulting the head nurse as to the wishes of the occupant. Patients who are able to take exercise can be trained to assist the librarian with the task of book delivery.

Ambulant patients should return their own books. Head nurses should be instructed by their superintendent to see that patients return their library books before leaving the institution, and that patients and nurses do not borrow books from each other. All books must be charged through the library. Patients should not be fined for overdues, and it is doubtful whether they should be asked to pay for lost or damaged books. Hospital employees, however, may be fined if the superintendent agrees and should certainly be asked to replace any volumes that are missing or damaged.

The monthly list of additions to the library should be posted on the hospital bulletin boards, and should be among the lists that circulate daily with the book truck. Western stories, mysteries, sea stories, short stories, love tales, suggested courses of study and other similar lists should be made and kept in a loose-leaf folder, circulating with the book truck. In some hospitals, fiction is further classified by pasting colored stars on the backs of the books, red for adventure; blue for love; yellow, detective and mystery; green, Western; black, short stories; silver, good all-round novels.

General hospitals can often arrange to supplement their collections or to meet special requests by borrowing books from their city libraries or through the state library commission, if they are state aided institutions. These books should be specially handled so that they do not get mixed with the others, and should be returned promptly. If they get into the contagious disease wards by mistake, they should be disinfected before being returned.

*Disinfecting Books*

Direct sunlight is probably the best disinfectant for books. For those who feel safer with something mechanical in the way of sterilization, I have seen two methods recommended. In 1912 L. B. Nice, Harvard Medical School, advocated the use of moist hot air at 80° C., and 30 to 40 per cent humidity, for thirty-two hours, which he said would kill all nonsporing bacteria in closed books, including tubercle bacilli in thick layers, and would not injure bindings.

THE MODERN HOSPITAL for June, 1924, recommended sterilization in a steam autoclave.

though it is stated that unless great care is used the books are damaged.

In our hospital, when the books get too old and soiled, we burn them. It is doubtful whether tuberculosis is ever carried by books, and unless the last user was known to be careless in his habits it is needless to sterilize these books. When books are lent to a tuberculosis hospital, it would be well to expose the pages to direct sunlight or to the rays of a sun lamp before returning them, merely to reassure the lender.

#### *What the Librarian Must Wear*

The librarian should wear wash dresses or a surgical coat or wash smock over her clothes in a contagious disease hospital or in the contagious wards of general hospitals. She should keep her hands and pencils away from her face, and wash her hands carefully before meals and before leaving the hospital. There is no danger of infection to employees in a well conducted tuberculosis sanatorium. In fact, the librarian is usually surrounded by much more sanitary conditions than she would be in any public library.

Bibliotherapy is a term that I have noticed with increasing frequency in recent library literature. It refers to the curative properties of books in physical and mental illness. The term may be new, but the idea is old, for the Greek historian Diodorus tells us that above the library at Thebes was written, "Medicine for the Soul."

People are in hospitals for the purpose of recovering from illness or injury. Everything that hastens their recovery is good medicine, and all that retards it is bad. The hospital library's sole cause for existence is to help people get well. For this reason the question of book selection here is much more important than it is for the general library. The standard of choice is not literary merit, it is therapeutic value.

Hospital libraries are of four types, that of the general hospital, the children's hospital or children's ward in a large hospital, the mental disease hospital and the tuberculosis sanatorium. While the same general rules of book selection apply to all, there are a few special rules for the last two. They are as follows<sup>1</sup>:

1. Select many books that have objectivity of plot, that is, gripping, interesting adventure stories that give the reader no time to think about himself and that are no effort to read.

2. Buy books that contain lovable characters, especially those that tell of those who have triumphed against heavy odds.

3. Buy books whose authors take a wholesome view of life and have a balanced or slightly op-

timistic trend of philosophy. There are many brilliant writers who are pessimists, but a hospital is not the place to read their works.

4. Avoid novels with pathologic characters, or that stress illnesses or feature the mistakes of doctors or nurses. Avoid all stories of suicide.

5. Do not buy books written chiefly for ethical or religious purposes. Everyone of us has his own particular religious bias, and this is usually stronger during illness.

6. Many wholesome love stories should be included. Novels dealing with sex problems and moral delinquencies are not for the hospital library, though patients plead for them, though they are books of the month and literary critics laud them to the skies.

7. Mystery and detective stories now so thoroughly the vogue may be bought, but have to be carefully watched for almost all of the drawbacks mentioned above.

8. There should be good biographies and travel books.

9. If there is a foreign element among the patients, provide for them in the library.

10. Buy books with large, clear type, light in weight and easy to hold.

At the American Library Association hospital round table last year it was announced that the association had published an annotated list of thirty titles recommended for hospital libraries, and would continue this service.<sup>1</sup>

More light fiction should be bought for general hospitals than for the others. Patients usually remain in general hospitals only a short while and are acutely ill while there. Their type of reading during illness or recovery will naturally be much lighter and more purely for entertainment than the reading of the nervous or the tuberculous patient who may be hospitalized for months or years, and who often feels quite well for weeks at a time.

#### *Choosing Books for the Nervous*

Books for the nervous patient must be more strictly censored than for any other. To the taboos before mentioned about books on illness and suicide and erotic novels must be added psychologic or self-analytical stories and bloody and gruesome ones, including crime books and war novels, also books on law, medicine and mental hygiene. These should be issued to patients only with the doctor's consent. The head nurse should be consulted frequently and the individual case records should be studied so that the librarian may keep away from the pet theories and aversions of mental patients.

<sup>1</sup> Adapted from L. Sweet, *Library Journal*, December, 1929.

<sup>1</sup> Printed in *Library Journal*, February 15, 1930, pp. 167-169.

For the tuberculous, it is not necessary to avoid books mentioning the disease, because if the book is well written it may help the individual to bear his trouble better. But depressing stories of any illnesses should be avoided, particularly books describing the final stages of consumption. Exciting stories likely to cause a rise in temperature should not be given to bed patients, although patients able to take exercise may read them with impunity. As rest is the main factor in the cure of tuberculosis, books that tax the mind should not be lent unless the patient has reached the convalescent stage.

Because it expresses so exactly my views on bibliotherapy, I take the liberty of quoting a paragraph by E. F. Garesché, taken from *Hospital Progress* for October, 1926:

"The books in a well chosen hospital library stand row upon row on the shelves like phials in a pharmacy. These precious packages contain medicine for the mind, more keen, more cordial than the medicines of the body. If anyone is sad, a book will cheer him; if anyone is dull and weary, a book will instruct him; if fretful, it will calm him; if rebellious, it will bring him peace. But just as the medicines of the body need to be studied, known, administered with skill, so there should be in every hospital a physician of the mind, a skillful student of books, who will recommend to every patient the phials of sweet thoughts and cordial sentences best suited to his mental cure."

#### Bibliography

Jayne, W. A., *Medical Literature and Medical Libraries*, *Medical Library Association Bull.*, N.S. Vol. 6, No. 1, July, 1916, pp. 1-12.  
 Streeter, Edward C., *Medieval Libraries of Medicine, 500 A.D. to 1500 A.D.*, *Ibid.*, Vol. 10, No. 3, January, 1921, pp. 15-20.  
 Place, Frank, Jr., *First Steps in Medical Library Work* (A lecture before advanced class in the N. Y. Public Library School), *Ibid.*, Vol. 10, pp. 37-47.  
 Elliott, J. E., *The Relation of the Library to the Hospital*, *THE MODERN HOSPITAL*, Vol. 14, 1920, pp. 432-435.  
 Myers, G. W., *The Medical Library in the Hospital: the Key to a Thousand Problems*, *Ibid.*, Vol. 24, 1925, pp. 260-262.  
 Suggestions for the Medical Library of the Hospital, *Jour. A.M.A.*, Vol. 92, March 30, 1929, pp. 1122-1127.  
 Nice, L. B., *The Disinfection of Books*, *Bull. Medical Library Association*, N.S. No. 4, April, 1912, pp. 61-66, with bibliography.  
 Lauerbach, Books in the Dissemination of Contagious Diseases, *Bull. Johns Hopkins Hospital*, Vol. 27, June, 1916, p. 183.  
 Jones, E. K., *Infection*, *The Hospital Library*, p. 43.  
 Sterilizing Books Used in Contagious Disease Hospital, *THE MODERN HOSPITAL*, Vol. 22, 1924, note pp. 586-587.  
 Jones, Perrie, *Reading—A Doctor's Prescription in the Hospital of St. Paul*, *THE MODERN HOSPITAL*, Vol. 19, 1922, p. 229.  
 Green and Gifford, *Two Hundred Fifty Books for Ward Patients*, *Ibid.*, Vol. 20, 1923, pp. 582-583.  
 Jackson, J. A., *Therapeutic Value of Books*, *Ibid.*, Vol. 25, 1925, pp. 50-51.  
 Sweet, L., *Reading Predilections of Patients in Veterans' Hospitals*, *U. S. Vet. Bur. M. Bull.*, Vol. 3, 1927, pp. 911-914.  
 Pomeroy, E., *Book Therapy in Veterans' Hospitals*, *Ibid.*, pp. 231-235.  
 Creglow, E. R., *Therapeutic Value of Library Service*, *Ibid.*, Vol. 4, 1928, pp. 445-448.  
 Jones, E. B., *Library Service in a Tuberculosis Hospital*, *Ibid.*, pp. 941-944.  
 Ireland, G. O., *Bibliotherapy: Use of Books as a Form of Treatment in a Neuro-psychiatric Hospital*, *Ibid.*, Vol. 5, 1929, pp. 440-445. This article was also reprinted in the *Library Journal*, December, 1929.  
 Sweet, L., *Prescribing Books for the Sick*, *Library Journal*, Vol. 54, December, 1929, pp. 969-971.  
 Morris, E. F., *Selection of Modern Fiction for Hospital Use*, *Ibid.*, pp. 975-978.  
 DuBois, Isabel, *Biography and Travel Have Large Place in Naval Hospital Libraries; Patients' Books Must Be Selected to Fit Individual Likes and Conditions*, *Hospital Management*, Vol. 29, February, 1930, pp. 45-48.  
 Jones, Edith Kathleen, *The Hospital Library*, A.L.A., 1923. See chapters on Book Selection, Books to Read Aloud, and Book Frigates, Listing Titles of Fiction, Nonfiction, General Periodicals, and Children's Books. Also, Books for the Nurses' Library.

## Site Near Vacation Center Refused to Tuberculosis Hospital

As a result of recent litigation in New Jersey, the Deborah Jewish Consumptive Relief Society has been refused permission to build a hospital for tuberculosis in the borough of Hopatcong, the *Journal of the American Medical Association* reports.

When the society sought the permission of the state board of health of New Jersey to build the institution at Hopatcong, a summer vacation center, municipal authorities and many taxpayers protested, saying that the proposed sanatorium would tend to bring tuberculosis to those seeking health and recreation in the community. The board denied the application, and the society sought the aid of the supreme court of New Jersey.

The legislature has given the board "sole authority to grant or refuse a permit," said the court, which means that, when there is any reason to justify the action of the board, no other tribunal has the power to change the result. The court also said that the course and communication of tuberculosis are not so thoroughly understood as to justify the court in saying that the board must grant a permit for the establishment of a sanatorium for tuberculous patients adjoining a summer vacation center.

## The Practice of Borrowing in the Open Market

Borrowing in the open market for money to build new hospitals, to purchase building, real estate or equipment appears to be the established practice in Philadelphia, according to statistics published by the Philadelphia Hospital and Health Survey.

In numbers of instances, hospitals borrow to meet deficits in maintenance costs. In some cases the borrowings are to meet temporary shortages due to unusual fluctuations in incomes and large purchases to take advantage of cash discounts, to finance the cost of carrying additions to bed accommodations until the slack is taken care of by increased earnings and to remedy a chronic state of insufficient income that has a cumulative deficit too large to be met out of current income.

The cost of borrowing money varies from 4 per cent to 6 per cent. The majority of Philadelphia hospitals that borrowed money paid an interest rate of 6 per cent. The sum represented by the amounts borrowed at other than 6 per cent was \$1,028,291, constituting 14 per cent of the total outstanding at the time that the survey was made.

How are loans and mortgages paid? The policy varies. Such debts are met in the majority of the city's hospitals by financial campaigns, special appeals to interested friends of the hospital, or they are paid from gifts, bequests, interest from securities, by the sale of lands or by rentals.

"Hospitals with little or no endowment that do not limit the amount of service they furnish free must look to the community for the necessary funds to meet the difference between income and expense," the survey points out. "Although the community ultimately pays the bill in the resulting higher maintenance expense, the hospital managements, particularly the executives, carry the burden of the responsibility of maintaining standards of service in the face of discouraging financial situations."

# Applying the Methods of Business to Sanatorium Management\*

By ROBERT G. BELL, M.D.

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A REVIEW of the literature on the organization of tuberculosis sanatoriums impresses one forcibly with the fact that although many articles may be found covering specific phases of the work, as a rule they fail to consider the subject as a whole. For this reason it has seemed worth while to make organization the subject of this paper.

For a great many years there has been a prevailing idea that the operation of a hospital or a sanatorium differs in some unexplainable way from the operation of other business organizations. The result has been that methods of administration have been tolerated that no business organization would permit. An intimate understanding of the problems of sanatorium operation indicates they differ in no way from those of a manufacturing plant or a similar organization.

The business world has demonstrated successfully that certain fundamental principles of administration are necessary for efficient operation: (1) There should be a policy forming group, usually known as the board of directors or trustees; (2) an organization to function properly must have centralized responsibility and authority, and the logical point for this is the administrative officer of the institution.

Most sanatoriums have a board of directors and an officer whose title is usually that of superintendent. The administrative efficiency depends, however, upon three factors: the manner in which the board of directors functions; the status of the superintendent, as determined by the board of directors and the qualifications and ability of the superintendent.

## *The Status of the Board of Directors*

The board of directors should be chosen because of the preeminent success of the members in their respective fields of endeavor. The members should be willing to accept full responsibility for the operation of the institution. They should not delve into the details of administration but they should clearly understand the fundamental

principles of business administration. It is their duty to formulate all policies and to select a superintendent qualified to carry them out.

The status of the superintendent should be the same as that of the president or general manager of a manufacturing plant. He should have absolute authority over the entire activities of the institution. Administrative interference by the board of directors or by advisory boards has ruined more than one institution.

## *How Superintendent Should Function*

He should, as an executive officer, be an ex officio member of the board and a member of every committee. As such, he must aid, and to a certain extent direct the formulation of its policies. Large business organizations do not presume to formulate operating policies without the advice and counsel of their executive officers. He must be able to plan and direct the work of others. He must have a sound knowledge of the laws of hygiene and sanitation.

The superintendent must have a mechanical sense in order that he may decide questions of mechanics that arise, particularly in regard to the purchase and repair of equipment. He must possess a purchasing sense whether he actually does the purchasing or merely supervises it. He must be familiar with the various conditions that affect prices, so as to judge wisely when and in what quantities to buy. He must be able to analyze cost figures, balance sheets and records of performance. In other words, he must have a financial sense. He must have a sense of publicity values. The tuberculosis sanatorium is a part of a campaign of education in the eradication of tuberculosis, and unless he is capable of doing his part in the campaign this work is certain to be handicapped.

He must be able and willing to obtain and make use of expert advice and counsel. No superintendent can otherwise expect to solve all the problems that arise from his diverse activities. He must at all times keep his board informed as to the essential details of operation and as to the working out of policies formulated

\*Paper read at the meeting of the Mississippi Valley Sanatorium Association, Grand Rapids, Mich.

July, 1930

by the board. Such information creates a feeling of confidence and cooperation and tends to prevent administrative interference. He must be able to correlate the various activities of the institution so that each unit works as a part of one machine, and not as a collection of separate units working independently of one another. Unless all the various departments are correlated directly under the immediate direction of the superintendent their efficiency must necessarily be impaired. He must at all times keep his mind free to direct the activities of his institution as a whole, and at the same time he must be fairly intimate with the detail of performance. Machinery must be created to bring such facts to his office routinely and not incidentally. Unusual occurrences must be reported promptly.

No superintendent can do detail work without letting his executive work suffer; hence, he must organize his staff in such a way that others will do this detail work and do it in the manner that will carry out the ideas of the superintendent. If the superintendent is to confine the major portion of his time to executive duties, the detailed activities of the institution must be handled in some other way. It is impossible for the superintendent to supervise the entire personnel directly, and if he is to have complete direction of all activities, he must divide these into departments. The number of these will depend upon the size of the institution. The importance of proper departmentalization increases directly with the number of departments necessary.

#### *The Method of Departmentalization*

These departments should be organized on the same general plan as the institution as a whole. Departmental authority and responsibility should be fixed in the department head. Department heads should be held strictly responsible for results. To obtain satisfactory results they must have the necessary authority. They must directly supervise all activities of their departments. They should have control of the appointment and dismissal of the department's personnel. They should receive and carry out all instructions for their department directly from the superintendent; otherwise the efficiency and morale of the department will soon be lost. They must have administrative ability.

It is the duty of the superintendent to see that a well defined line of contact is established between his office and that of the department head. The appointment of the department head presupposes the superintendent's confidence in the ability of that individual to administer efficiently

to needs of his department. There remains to be established a personal contact through which instructions for the department may be given and departmental and interdepartmental problems and the aims and policies of the institution discussed, a contact by which the superintendent may obtain details of departmental operation. The success of this method of contact depends for its success upon the accessibility of the superintendent for conference.

#### *Group Meetings Are Valuable*

Contact may also be secured by holding group meetings of the department heads. To be of any value the meetings must be held frequently. One difficulty lies in getting them all together at the same time. Group contact has its greatest value when it is used as an adjunct to personal contact, and when interdepartmental problems and policies are under consideration. Department heads should use the personal contact method and the private conference in handling departmental problems. They should organize their departments on the same basis as that of the institution as a whole, delegating responsibility and authority down the line through the personnel of their department, at all times keeping in mind that each is only a single unit in a system working for a common end. Cooperation and coordination between all the activities of the institution are necessary if the efficiency is to be high.

In many institutions we find an assistant superintendent. If the departmental system works as it should with the assignment of authority and responsibility to the various department heads, there is no place for such an officer except at such times as the superintendent may be absent. During such times it is essential that someone take up the duties of the superintendent. One of the department heads should be trained to do this. To succeed, his authority must be recognized. The title of assistant is an aid in getting this recognition.

With the superintendent on duty, the assistant should not be used as a third party between the superintendent and departmental heads. His department should be one, however, that brings him in frequent contact with the superintendent in order that he may become familiar with the duties and the policies of the institution and of departmental activities. The department head who fills these qualifications best is usually the medical director. In the smaller institution the two duties are usually combined. In the larger institution the duties of the superintendent are too great to permit one man to do justice to both the executive and the department work of medi-

cal director. One or the other is certain to suffer. If the superintendent in a large institution is also the medical director, the greater part of the medical work must be given a physician who in reality becomes the medical director. In other words, under the plan the medical direction is only a department, although unquestionably a most important one.

Efficient administration demands an intimate knowledge of all institutional activities. The greater part of this must be supplied by department heads. Such information is at its best only secondhand and should be confirmed and checked insofar as is possible by direct observation. This may best be accomplished by a system of complete rounds made at regular intervals. Aside from the information obtained, such rounds by the superintendent will aid in maintaining and improving the morale of the personnel.

The proper management of any institution requires a definite system for the transmission of instructions. Orders by word of mouth are easily forgotten and at the same time are subject to misinterpretation. Printed orders, if bound, may become obsolete. Written orders in loose-leaf book form overcome both of these objections. All such orders should be acknowledged by the signature of interested persons. Such a system is flexible and permits any order to be canceled or modified.

#### *Securing Efficient Operation*

Efficient operation in a large institution demands that the department be run along the lines described. The question may arise as to whether the suggestions made can be applied in the running of a small institution. It is my opinion that they not only can but that they are equally necessary for efficient operation.

The organization of an institution on the basis given is, of course, an ideal one. It is not a suggested experiment, since the business world has demonstrated its success and enough institutions have tried it to demonstrate its worth. Even under these conditions the administrative officer has a difficult task, but one that gets easier when the proper organization is complete and working smoothly.

The organization of a sanatorium then may be summarized briefly as follows:

The superintendent should have complete authority over all activities of his institution.

He should, as an ex officio member of the board, aid in the formulation of all policies, and in addition he must be responsible for carrying them out.

He should departmentalize his institution, dele-

gating the proper responsibility and authority to the department heads.

It is the duty of the board to formulate all policies, with the aid of the superintendent, and to see that they are carried out. It is also the duty of the board to secure an exceptionally competent individual as superintendent.

The success of this plan of organization depends upon the formulation of sound policies, the efficiency of the superintendent, the establishment of the proper lines of responsibility and authority and, last but not least, the absence of executive interference.

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#### Flowers in the Sleeping Room Are Beneficial

Flowers are beneficial rather than harmful in hospital and other sleeping rooms, according to a recent statement issued by the Department of Agriculture.

The belief that plants should be removed from sleeping rooms at night is entirely without foundation, according to Dr. A. F. Woods, director of scientific work in the United States Department of Agriculture. In many hospitals it is a regular practice to remove flowers and plants from the rooms at night, because it is thought that they are in some way injurious to the patients.

Instead of plants being harmful, they are beneficial, says Doctor Woods. During the day they give off oxygen and moisture and take up carbon dioxide. At night these processes slow down and small amounts of carbon dioxide are given off, but a whole greenhouse full of plants would not give off enough carbon dioxide to affect injuriously the composition of the air.

The only occasion for removing plants and flowers from sleeping rooms is in the case of poisonous plants and in cases of people who suffer from hay fever. In these cases, explains Doctor Woods, plants and flowers to which the patient is sensitive should not be in the room at any time.

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#### Contributions Psychiatric Clinics May Make to Case Work

What contributions may the psychiatric clinic make to case work? Dr. Frank J. O'Brien, medical director, Louisville Psychological Clinic, Louisville, Ky., summarizes them as follows in a paper that was read before the Indiana Society of Mental Hygiene:

1. A better understanding of the detailed motives and causes and personality patterns that are at the basis of all conduct, desirable and undesirable.

2. A better understanding and evaluation of the environment and all the social conditions that tend to mold personality.

3. The educational program. Because the results of preventive work of themselves are not spectacular enough to grasp the imagination of the community as a whole, it is necessary through talks, articles, discussion groups and the like, to inform as large a number of people as possible what are the problems that concern the clinic, their importance, means of correcting them and what constitutes "results."

# A Hospital That Provides a Unique Service for the Nervously Ill

THE Neurological Institute, New York City, stands out among modern hospitals as offering the most complete clinical service yet devised for the care of patients who are nervously sick. Architecturally, its lines are modern. Its upward sweep suggests progressive things. Of light brick construction with limestone trimmings, it conforms in general aspect to the spirit of the other buildings in the surrounding medical group. It is a plain, well integrated structure, and the masses of its light and shade are a sight to please the artist's eye.

The building is thirteen stories high, with penthouse structures on the roof. Sunshiny wards are generously supplemented by outdoor extensions on the roofs and wings. Small-paned casement windows give an agreeable impression of the quiet informality within.

Formally opened in March, 1929, as the tenth independent unit of the Columbia-Presbyterian Medical Center, the Neurological Institute coordinates actively with all other units of the center for the diagnosis and specialized care of the many



By CHARLES F. NEERGAARD  
New York City

field. This segregation of specialists was an arresting medical venture at the time, and represents almost the first consistent plan for individualizing neurological treatment on the strict basis of alert, sympathetic, scientific observation of the most minute behavior reactions. The specialists worked side by side in studying the basic causes of nervous disorders and in working out methods of treatment therefor.

The better understanding of the patient thus achieved served to eliminate many of the physical and psychological maladjustments complained of. A hopeful outlook was aroused in the patients, and the demand for service increased. The eighty-five beds of the original institution became

nerve disorders that arise in the course of other illnesses. For patients with primary brain and nerve disorders, it affords a soothing environment in which their sickness can be accurately observed.

The Neurological Institute, first organized in 1909, had as its original purpose the prosecution of research in neurology and the improvement of medical education in this highly specialized

wholly inadequate. Activities multiplied. An out-patient department was developed which served three or four times as many patients as could be accommodated in the wards.

From the first the institute has been operated as a preventorium. It takes strict account of the so-called functional disturbances. The plan formerly employed of segregation without the opportunity for study fostered the development of chronic mental disease. With the newer plan, the patients receive treatment early in the course of the disease

when there is some chance for recovery early. Hundreds of patients passed through the Neurological Institute during 1929. The percentage of cured and benefited patients compares favorably with results achieved in general hospitals. The average stay was twenty days. The very names of the institute's clinics suggest the nature of the constructive work done. There are the mental health clinics, the guidance department, the psychology laboratory, all of the utmost social and medical importance.

The Neurological Institute is a 208-bed hospital. This includes eight beds in wards for children which supply a long neglected need. The children's department is already filled to capacity and will require early expansion. It is a sophisticated civilization that takes a true account of neurological service. It is pure science that makes it effective.

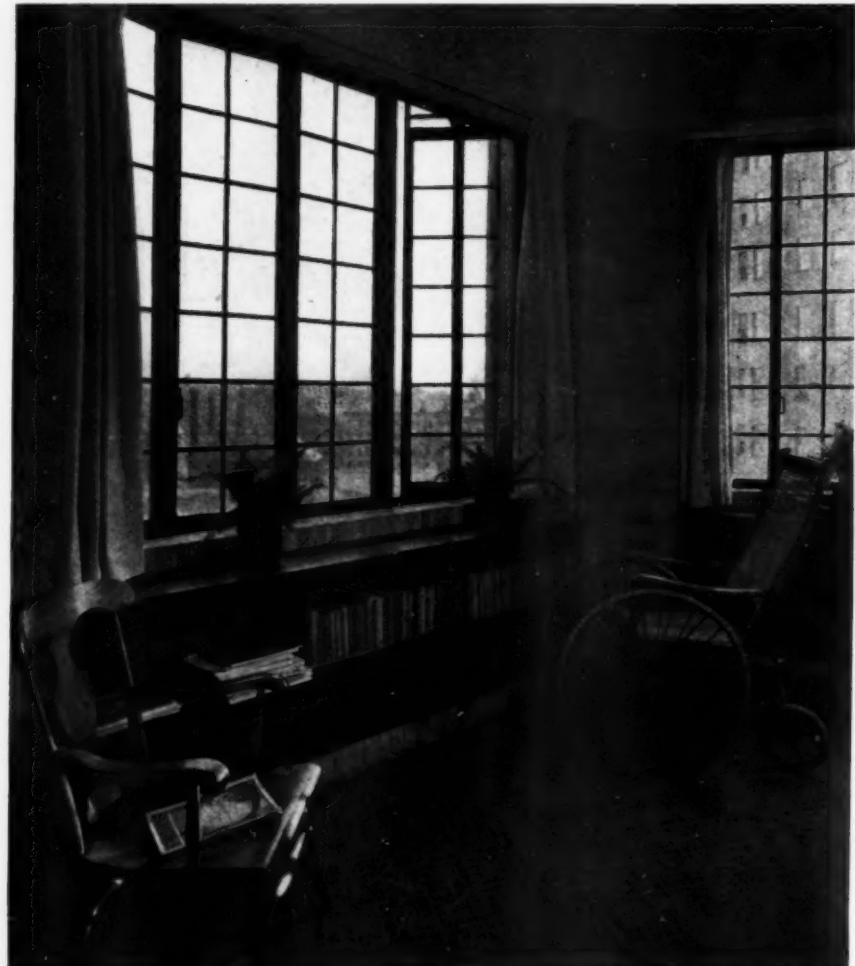
The evolution of the building plan on the basis of internal activity and service needs is an in-

teresting study. There was no similar institution in existence. There was no precedent to follow. Internal committees were formed to work with the architects, James Gamble Rogers and Howard Moise, and the consultant, Charles F. Neergaard. Dr. Frederick Tilney, head of the research group, Robert Thorne, president of the board, and Dr. C. Burns Craig and Dr. Charles Elsberg, representing the medical staff, aided in the development of the plans. Mrs. Henry P. Davison and her committee are responsible for the charming color scheme. Col. Walter L. Bell acted as furnishing consultant. Esther F. Rivington, superintendent, worked out administrative and other details, and Gertrude Dwyer, superintendent of nurses, supplied data upon which staff housing plans were based.

The type of patients and the cycle of acute and convalescent treatment they receive are essentially different from those in medical and surgical hospitals. Many of the patients are up and about during

the major part of their hospital stay, and many of the facilities required are therefore different from those of a general hospital.

Eighty-three private rooms are provided in which a homelike atmosphere is featured. Of these, forty-eight are *de luxe* suites, which have a bedroom with private bath or toilet, complete individual service arrangements, storage space and beautiful appointments. Thirty-five private rooms are as efficacious therapeutically as the more luxurious ones, but are more compact and more economically planned for patients with smaller



Here is shown a cheerful corner of a solarium on one of the patient floors.

stitution follow. with toward gaard. group, Dr. C. esent- ent of d her rming heme. ter L. ed as shing ant. Riv- super- ent, nt ad- trative or de- Ger- wyer, dent, sup- a up- staff plans d. type of and e of con- ent they e es- differ- those al and hosp- any of ents and bring many different

in incomes. There is running water in every private room and the majority have private toilets. Each large ward has its utility room so placed that hall traffic is reduced to the lowest possible minimum and nurses' steps are saved. Facilities for washing and sterilizing bedpans are planned so as to keep bedpan travel largely out of the corridors. Each wing is provided with rooms for isolation. These rooms are physically separated from the other patient quarters and are scientifically sound-

proofed so that one restless or excited patient cannot disturb others. Hydrotherapy and thermotherapy can always be employed to soothe such a patient.

Not only in the private rooms but in the wards minute attention was given to harmonious color effects. The largest ward contains twelve beds. Individual treatment does not necessarily mean isolation. It may mean just the opposite. Many persons are better treated in groups. Patients



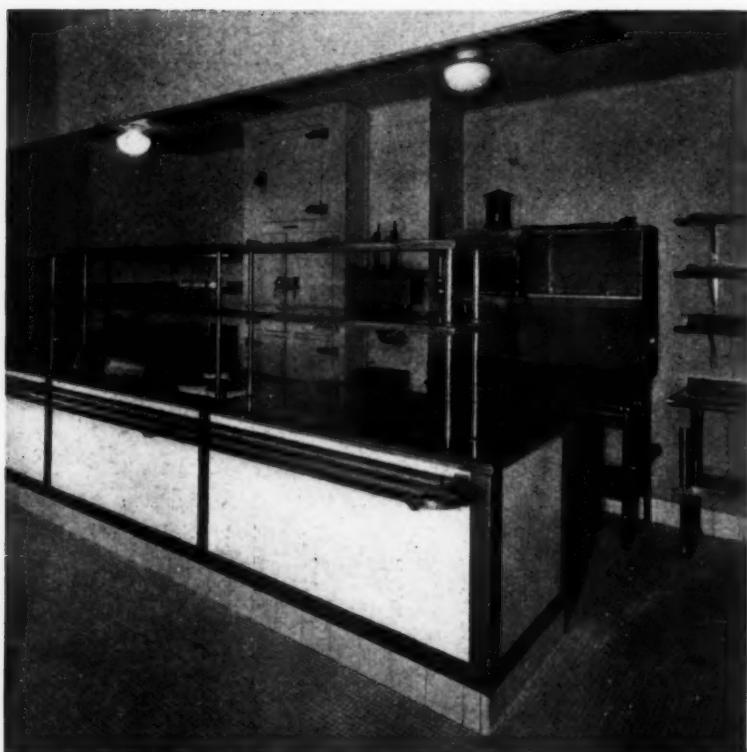
lounges, on one of the penthouse floors, is attractively decorated in sand and rust. The windows overlook the Hudson River and Morningside Heights.



The nurses' lounge, on one of the penthouse floors, is attractively decorated in sand and rust. The windows overlook the Hudson River and Morningside Heights.



*The tray carts used were especially designed for central tray service. They hold twelve trays each, are unheated, and have solid rubber bumpers, as shown above. Below is illustrated the nurses' cafeteria.*



may occupy wards for economy, or they may be there for group study. They may take a ward because they do not like to be alone.

Two delightful solariums are on each patient floor.

The general therapeutic scheme of the Neurological Institute is not fundamentally different from that of any other hospital. It is primarily a diagnostic service. Mental cases are not eligible for admission, such patients being cared for in the Psychiatric Institute adjoining. Patients with psychoneuroses are treated. The surgical service is highly specialized and is definitely limited to operations on the brain, nerves and spinal cord. Children are admitted for conduct disorders and operative conditions, such as brain tumor, hydrocephalus and nerve transplantation. The activity of the children's ward indicates a special need for expanding service of this kind.

There are six separately administered services within the hospital, one surgical and five medical. The medical services are highly inclusive, for the patient with sick nerves is not exempt from any physical ill. A relatively large percentage of the patients are apparently well and are quite able to be up and about. More space for each patient is thus required and much attention has to be given to recreational facilities and to interesting occupations. Activities become diagnostic, and the patient must be made to feel as free as possible to do what he pleases, since he must be observed unobtrusively. The nursing staff, all of whom are graduates working for additional credits, are ever alert to distinguish between significant signs and aimless or meaningless reactions.

The therapy department, on the eighth floor, opens out on the first series of roof spaces. These rooms, all light and cheerful, use the roofs of the wings as outdoor extensions. The mechano-therapy room has mechanical apparatus of all kinds for corrective and resistance exercises, vibration and massage. The setting up exercises are taken on the roof. In this institution physical therapy has developed to a point where the at-

*All windows have a special locking device that will prevent a hysterical patient from jumping out. The resident staff's lounge, shown below, is equipped with every comfort.*





*Friends of private patients are entertained in the attractive visitors' rooms, one of which is on each private floor. Paneled walls and plain draperies lend an air of dignity to these rooms.*

tending physician does not need to prescribe any given activity for his patient. He states the patient's limitations and what is to be achieved through exercise, whether greater range of movement, a better power of concentration, a renewal of interest or reeducation of helpless muscles or parts of the body. Skilled persons in charge plan activities, vary the schedules, watch responses and make reports of progress to the attending physician. It is not so much what is done, but how it is done and the manner in which the patient reacts that count. Stereotyped procedure has no place in the scheme of treatment.

There are departments for phototherapy, thermotherapy and electrotherapy, with instruments yielding every modality of this form of treatment, including high frequency, galvanic and faradic currents. A large staff of men and women who were trained in Sweden give manual massage. Hydrotherapy here becomes a precision instrument for the care of nervous patients. There are soothing, continuous baths under constant conditions. There are stimulating needle sprays. There are medicated waters. There are tanks for reeducational movements under water. There are continuous recording instruments to visualize whatever treatment is given, and automatic mixing valves and pressure control to secure and maintain any set of conditions the physician may prescribe.

The ninth floor is devoted to the care of surgical patients. The operating rooms on the tenth floor are decorated in a soft green. Shadowless lights,

noncorrosive metal and matt tile are used, the tables are conveniently placed and the smallest appliances are so arranged as to be instantly available.

Within the building quarters are provided for twelve interns and for sixty-seven nurses. There are also bedrooms for ten members of the domestic staff. This last feature promotes continuity of service and is useful in the event of hospital housekeeping emergencies. The nurses are all graduate students, specializing in neurology and psychiatry. The interns are graduate medical students with not less than one year of internship in general hospital work.

The three top floors and the penthouse are given over to the nurses' quarters. Every nurse has a separate bedroom, decorated individually. The penthouse structures provide a nurses' lounge, 23 by 48 feet, a library, classroom and serving pantry. The hospital's colorful decorative scheme is nowhere more happily utilized than here. The windows frame far vistas of the Hudson River and Morningside Heights. They invite the nurses out to their own private porches under unobstructed sky. The lounge itself is beautifully simple. The colors are sand and rust.

The all important factor of food service has been given careful consideration. The most modern types of central tray set-up and central dishwashing have been adopted. This eliminates most of the noise, confusion and odors of food from the patients' floors. The kitchens were planned by a consultant on food service. They are in the base-

ment. Receiving rooms on the south open upon driveways that are below the entrance level but entirely above ground. In this department there is the same unity of service as in other parts of the hospital.

The kitchen proper is in the shape of a long rectangle, with the bakery at one end and the dishwashing machines and a cafeteria for the help at the other. Storage and preparation departments are placed on an axis with the main kitchen. A diet kitchen and the director's office are directly behind the tray service. Storage rooms for milk, butter, meat and vegetables are reached by a central corridor at right angles to the line of ranges and kettles, the meat room being an especially desirable feature. The kitchen equipment throughout is of a chrome nickel steel, satin finished, which requires no polishing.

Storage and preparation service are planned to eliminate extra steps, supplies being checked at the receiving room and issued to various storage rooms and refrigerators. The preparation rooms for meat, vegetables and salads are close to the large storage refrigerators, which are especially constructed for that purpose. Salads and desserts are prepared in a special department. Raw foods pass from the preparation departments to

the kettles, ranges and steamers and thence to the serving tables where the trays are filled. Salads and desserts are prepared in sufficient time so that they may be thoroughly chilled in the counter refrigerator, which is large enough to hold a salad and dessert for each patient. The efficiency of the service is enhanced by the use of chilled plates for cold food and heated plates for hot food.

The tray carts, set up prior to each meal, take the place of tray racks and are passed by the hot and cold service tables in numbered sequence, each tray being checked by the dietitian for accuracy and daintiness of arrangement. The carts were specially designed for central tray service. They hold twelve trays each, are unheated and are equipped with solid rubber bumpers which make it impossible for them to mar projecting corners or doorways. The china is unusually light and artistic. The service for private patients has a flower pattern on a creamy background, and that for the nurses' dining room charmingly repeats the flowers and birds in the drapery design.

Ruth Bigelow, the dietitian in charge, has two assistants. There are forty-eight employees in the department. They work seven hours a day in three different shifts. There are three chefs



*The private patients' rooms have been thoughtfully and tastefully planned.*

and a woman cook, who is responsible for preparing all foods for the salt-free, fat-free and other special diets. The kitchen help is of an unusually high type and discipline is good. It speaks well for the kitchen engineering plan that three minutes ordinarily, and never more than five, are required for food carts to be prepared and delivered to the floors on which the trays are to be served.

Private patients have the privilege of ordering special food. Menus are submitted for checking the day preceding. The special diets served at any one meal include from eight to ten ketogenic diets, two or three diabetic diets, a few Mosenthal diets, and several nephritic, hypertension or reducing diets. The kitchen is capably managed and the patients are satisfied with the food.

The heating system is of the low pressure vacuum type. Proper ventilation is achieved by means of a directional current, windows for air and mechanical exhausts from the corridors, the tops of the clothes chutes, the utility rooms, the interior toilets and other possible points where fumes or odors may arise. The windows used are of the center hinged casement type, opening out, and permitting ideal change of air without drafts. They have small panes and a locking device so that they cannot be opened far enough for a delirious patient to jump out. In efficiency and artistic effect they represent a great improvement over windows of the factory type which many schools and hospitals have thought it necessary to install.

A neurological hospital should be thoughtfully planned to ensure silence, efficiency and inconspicuous service. The hypersensitive or maladjusted patient whose comfort depends on a suitable environment and the mental condition, the observation of which requires the nice perception that distinguishes the slightest deviation from habitual, normal reactions, must be taken into consideration in the planning of such an institution.

### Serving Hour in a Children's Hospital

It is serving hour in the ward of a large children's hospital. The usual monotony of the day has been broken by the advent of the food cart and all eyes are eager with expectancy as they glance over the trays to see what "favorite" is on for to-day. Voices ring out pleadingly with, "Please, nurse, get my tray," or "I'm so hungry, and I'm going to eat everything. Please hurry."

Soon all are served. Here is a little girl who is sobbing as though her heart would break. Her mother cannot take her home until next week, and she had planned on going to-day. All her hopes and plans are broken and

next week seems just as far away to her as next year.

Here is a little boy who does not appear to be interested in his tray but who seems absorbed with a miniature airplane. All enthusiasm, he tells us how he is going to be a pilot some day and fly up in the clouds or cross the ocean like Lindbergh. Perhaps science will be able to cure his tuberculous hip and he will be able to realize a part of his childhood dreams. The way these tiny youngsters make their adjustments in this strange, new environment is wonderful. An hour or two of tears when they first arrive, then calmness and quiet and in a day or two laughter and joy and comradely friendship for all the other little tots in the ward. Some have been here for months. They seem contented. Yet when the news comes that the doctor has written their discharge, their joy is unbounded and they look around for listening ears into which they may pour their confidences about "home." "I have a dog," says one. "Do you suppose he'll know me after all these months? I've had him ever since he was just a tiny puppy." "Won't my brother be surprised when he sees I can walk without a crutch?" says another.

A little girl, a diabetic, confides that all her food must be weighed before it is served and that she must have insulin three times a day to help take care of the food. She is a bright, happy child, and we wonder why nature picked her out for this special handicap.

We pass on down the long row of beds. The trays are nearly finished and second servings have been in great demand. Soon all of the trays will be cleared away and calm and quiet will settle over the room during the rest hour when bodies relax and gather the strength so necessary to the healing of bones and muscle that have been ravaged by disease, poverty and neglect.

What an inspiring place is a children's hospital!—  
*Frances B. Floore, formerly dietitian, University of Michigan Hospital, Ann Arbor.*

### Fixing the Responsibility for a Nurse's Negligence

A patient sued Touro Infirmary, New Orleans, for damages caused when, during the course of an operation, he passed into a state of profound shock and had to be revived by the use of hot water bottles and restoratives. The hot water bottles that had been placed about him so hurriedly burned him, he claimed, as to cause him to be partly disabled for life.

According to a review of the case in the *Journal of the American Medical Association*, the courts decided in favor of the infirmary. The suit was based on the theory, said the court of appeal, that the nurse who applied the hot water bottles was a servant of Touro Infirmary, for whose negligence the infirmary was liable. But a master to be liable for his servant's negligence must not only select the servant but also direct the manner in which the servant's duty shall be executed and control him in his acts in the course of his employment.

The nurses in this case were under the orders of the surgeons in the operating room, and thus were to be considered servants of the operating surgeon. The surgeon himself was employed by the patient, and not by the infirmary.

Touro Infirmary further denied liability on the grounds that it was a charitable organization and not incorporated for profit. All of this the court took into consideration.

# The Care of People of Moderate Means in Time of Illness\*

By FREDERIC A. WASHBURN, M.D.

Director, Massachusetts General Hospital and Massachusetts Eye and Ear Infirmary, Boston

THE necessity of taking action to improve the situation of persons of moderate means in time of illness is generally admitted. Articles in the magazines and daily papers upon this subject are frequent. The persons in question are becoming articulate. They demand and should have the best of chances for health and long life at a price they can afford to pay.

Illness in the home for them means care by the family physician alone. Good man as he is and indispensable, he would be the first to admit that he needs the advice of the specialist and x-ray, bacteriological and other laboratory investigations interpreted by carefully trained men. The cost of nursing in the home is great. The patient is too near home problems and anxieties for his or her good. Finally, in modern apartment life there is no room for sickness. Briefly, this is the argument, too conclusive to need further elaboration.

The problem divides itself into two parts—that which relates to the care of ambulatory patients and that which has to do with bed patients. The scope of this paper does not include the first group. That is a problem by itself and an interesting one. Our subject is confined to the care of bed patients in hospitals and such ambulatory patients as may be admitted to hospitals for the sake of the thorough study that can best be made there.

## *A Separate Hospital or Not?*

Where can this hospital care be provided in the way to give these patients the best and most efficient treatment and advice at the minimum of expense? Should separate hospitals be built for them or should they be accommodated in separate wings of existing institutions? The answer to this question would be different in different localities. Whenever it is at all possible, there are important reasons for building in connection with existing large general hospitals.

The staffs of such hospitals contain the most highly trained physicians and surgeons of the community, men accustomed to work together, to

review each other's work, to maintain the highest standards, to avail themselves promptly of new methods and to use to the best advantage the findings of the laboratories. These hospitals usually have a trained administrative staff whose services, with slight additions, may be used in connection with the expanded hospital.

## *What the Large Hospital Has to Offer*

Here exist nursing schools officered by able women. Staffs of resident physicians and surgeons and house officers may have their terms lengthened to give them a period of service in this department. Whether or not the nursing in the building for patients of moderate means is done by pupil nurses in whole or in part, the connection with a training school for nurses is an advantage. The care and checking of patients' records in connection with the existing record department, the use of medical and patients' libraries, the supervision of social service by the trained officers of this department of the hospital present inestimable advantages. The use of existing laboratories—pathological, chemical, bacteriological, x-ray, cardiographic, metabolism and others—each under the guidance of an expert, is an important help.

The economic advantage is great. A hospital for people of moderate means built by itself must duplicate many services which already exist in a great hospital and which by a small increase in personnel and space may be made to do duty for the added building. Expert roentgenologists, pathologists, hospital directors and other such personnel command high salaries and unnecessary duplication is expensive. The superintendent of works, the purchasing agent, the chief accounting officer, the apothecary, the storekeeper, are available. By giving them more personnel and more space they can take on the added work in the most economical way. The heat and the light and power would in some instances be supplied by the main hospital power plant. The hospital laundry may be expanded and used for this added department. The inference should not be

drawn from this argument that I favor centralization of all services. Decentralization is distinctly superior in most services.

If the unit for these patients is large enough, there should be an assistant director in charge whose first duty lies there and who has assistants whose work is confined to the building for patients of moderate means. Hospitals will work out this problem of what services should be centralized and what made nearly independent of the mother plant in different ways. Upon the wisdom shown in this depends largely the efficiency of the institution. Our conclusion then is that the hospital for people of moderate means should be preferably a branch of an existing hospital for two reasons—better service to patients and lesser cost of operation.

This matter of cost must be kept in mind at all times. Unless it can be kept low we have defeated our object of providing hospital care at a figure per patient that can be met by persons in the group we are considering. Modern hotels are built in large units so that the overhead may be distributed amongst many guests and the cost be low to each individual. The same principle applies to hospitals. The number of beds must be considerable for this reason and also because persons of moderate means are a larger part of our population than either the poor or the rich, groups for which our hospitals already care. A hospital now having beds for 400 of the poor and for 100 of the rich may well add a building with 300 to 400 beds for people of limited means. If this building, and a home to house the additional nurses, dietitians and others, be given and no attempt made to earn interest upon the investment or to charge for their depreciation, it seems possible to make this work self-supporting and to maintain the rates at a figure the patients can pay. If the unit is made much smaller or if the hospital is built separately from an existing one, an endowment for this work will be needed. If it is necessary to do all the nursing by graduate nurses, again an endowment will be needed.

#### *Staff Cooperation Is Essential*

It has been often said that many hospitals have semiprivate accommodations with low priced rooms for patients, where the physician may charge a fee for his services. This is true, and if that were the whole story perhaps the problem might be met by a simple expansion of such facilities. It does little good to the patient if he saves upon his hospital bill but pays more than he can afford to the doctor. For this reason the plan fails unless it has the hearty cooperation of the hospital staff members in agreeing to limit their

fees to a fixed sum for the patient of moderate means. This has two advantages—it limits the patient's total bill and enables him to know beforehand its approximate size. This is a great boon to any man who must look after his dollars carefully. The members of the professional staff of the hospital can be expected to take this step only if they are assured that great care will be taken in the admission of patients to this hospital.

#### *The Patient Must Do His Part*

The hospital and the doctor are each making a contribution to this problem. The hospital charges no interest on the investment, it does not charge depreciation upon the building and the doctor has limited his fee. The patient then must do his part. That consists in telling the admitting officer in confidence the amount and source of his income, whether from investments or salary, the number of dependents he has and his other obligations. These last may consist of the education of children, a mortgage upon the home or other indebtedness. The admitting officer must then consider the nature of the disease in connection with the other facts elicited before he determines whether the patient belongs in the hospital for patients of moderate means, in the private ward where doctor and hospital get full pay or in the general ward where the doctor gets nothing and the hospital less than cost, or perhaps nothing. If the patient is entering the hospital for a short stay, for observation or for some minor ailment, the line would be drawn in one place. If on the other hand he enters for a serious operation, if his future is dubious, the line would be drawn in quite another place.

The floor nursing should be generous so that special nursing is seldom required, since that increases the expense rapidly. Special nursing should only be allowed when actually necessary, not because of the whim of the patient.

The hospital should do everything possible to recompense the physician for his self-denial. It may collect his fee for him. It should provide the surgeon with his instruments, his surgical supplies and all the tools of his calling. It should give him resident surgeons and house officers to assist at operations; it should provide etherizers and trained nurses. The operating rooms and the delivery and labor rooms should be planned to save the surgeon's time and strength. There should be house officers to cover all services; there should be secretaries and record clerks and effective laboratories with expert officers to give service of the highest grade.

One great hospital has erected a building with an eventual capacity of 330 beds and is making a

demonstration along the lines sketched in this paper. The hospital in question is fortunate in having an unselfish, public-spirited staff which is heartily cooperating. I venture to predict that the staff members will get their reward not only in satisfaction in helping to meet a great community need but in actual financial return. It is already becoming apparent that they are getting fees from patients who were previously forced by economic conditions against their desires into the general wards of the hospital.

If this demonstration is successful and is followed by others, we shall be one step farther away from interference by the state in the care of the sick. We shall have helped in the contentment of the people and in the well-being of the backbone of the community, the people of moderate means.

In summary, attention is invited to these essential points:

1. The hospital for persons of moderate means should be a part of an existing large, well run general hospital. The reasons for this are: The care of the sick will thus be improved and the

per capita cost will be considerably decreased.

2. It should be a unit of considerable size to lower the per capita cost and to make an impression upon the problem of sickness in the largest group of the community—those of moderate means.

3. The cooperation of members of the professional staff and their agreement to limit fees are essential parts of the plan. It does no good to cut down hospital charges unless the professional charges are also regulated. This should be done by the voluntary action of the staff. Great care must be taken that patients well able to pay full hospital charges and full professional fees are not admitted to the hospital for patients of moderate means.

4. Good floor nursing should be available so that special nursing is required only for the sickest of patients who need constant attention. Special nursing should not be given unless it is absolutely necessary. Some of the nursing in this building may be given by training school students. Experience with patients of this group is important and of benefit to student nurses.

## Further Comments on Hospital Care for Patients of Limited Means

*A Discussion of Doctor Washburn's Article*

By J. B. HOWLAND, M.D.

Superintendent, Peter Bent Brigham Hospital, Boston

UNTIL recently, nearly all hospitals were used solely for the benefit of the poor. Apart from accident cases, only the poor needed hospital care. In tenements, there was no room for those who were seriously ill and there were no facilities for their treatment. For other than the very poor, the home was reported as the best place for the sick person. Hospitals often became dangerously infected. I can recall hearing surgeons say that they would not take their private patients to hospitals for operation because of the danger of infection, but would prefer to operate on them at home. Hospitals were considered even less desirable for the care of medical cases.

With the improvement in hospital technique and with the advent of the x-ray and elaborate diagnostic procedures, admission to the hospital became necessary for accurate diagnosis and for the best care both in medical and surgical cases. The rich then demanded admission to hospitals.

An attempt was made to provide for them by converting private houses into hospitals. These did not fulfill the requirements for good work. They were poorly adapted for operating room needs, they lacked service conveniences and were generally unsafe in case of fire. It was, then, a natural step for hospital trustees to build additional wings or pavilions for the reception of the rich. Funds given for the care of the poor were not available for this purpose, but it was not difficult to get money for building private pavilions, and it was not necessary to draw on the income from endowments for their maintenance. On the contrary, the profits from this department could be applied to charitable work. We have now all over the country good hospitals providing for the poor and for the rich.

That patients of moderate means are entitled to equally good care goes without saying. Doctor Washburn has discussed this thoroughly. Present day conditions favor the development of hos-

pitals for this class of patients. The number of rich persons in the country has grown rapidly in recent years, and it should be comparatively easy to obtain money to build this kind of a hospital or additions to existing hospitals. Many of the wealthy people of the country have formerly had limited incomes and will be sympathetic with the present needs.

#### *A Momentous Undertaking*

I agree with Doctor Washburn that if we are to provide adequate hospitalization for persons of moderate means at reasonable cost, we must start with buildings and equipment provided, and must not expect to add interest on the investment and depreciation charges to the weekly rate to patients.

Doctor Washburn, modestly, has not named the hospital he describes as having started this experiment. It is, of course, the Massachusetts General Hospital, Boston, which from its inception has been conspicuous in leadership. It is known as the birthplace of surgical anesthesia and has provided training for many noted teachers and clinicians. It is now leading in a demonstration of great importance, that of providing first-class care for persons of moderate means at rates within their ability to pay.

#### *Looking Into the Future*

Doctor Washburn's paper has emphasized the important points necessary for the success of the experiment, namely, a large unit to reduce overhead costs, the exclusion of those who do not really qualify as persons of moderate means, and the full cooperation of the staff in establishing fixed fees so that the approximate cost for each case can be estimated in advance. We shall all await further developments of this new hospital venture which is now well under way. It may be that charges will have to be revised upward if the operating cost is to be wholly met by receipts from patients. It is too much to hope that the present prices can be reduced for, with the present high costs of medicines, apparatus, supplies and salaries and wages, first-class medical care under the most favorable conditions cannot be cheap. It will, I believe, be necessary to make many refinements and regulations as experience may indicate. We may congratulate ourselves that this project was started here in Boston and we know with certainty that it will be carried out in the most careful way and that the interests of both the patients and the staff will be carefully considered. I predict that similar units will soon be added to our best hospitals all over the country, thus meeting a long felt need.

## The Talking Picture and Its Place in the Hospital

That the talking picture will open three new avenues of progress for hospitals of to-day is the belief of both the makers and users of talking picture apparatus. These three avenues are: the entertainment of convalescent patients; the training of student nurses by the sight and sound method and the presentation of screen entertainment in connection with hospital fund raising campaigns. A recently completed survey of the hospital field reveals that many plans that involve the talking picture are under consideration by many hospitals throughout the country.

Excerpts from the survey are quoted here:

"Motion pictures have been used as aids to instructing nurses and attendants in hospital work for the past decade in various parts of the world. One hospital, the *Serafimerlasarettet*, in Stockholm, has used films for medical instruction for fifteen years. But with the advent of the talking picture, the applications of the talking screen to medical and scientific advancement are increased a hundredfold. The hospital field has been awaiting the development of a portable motion picture sound projector, ready to plug into the electric light socket, and to be wheeled from room to room as required.

"Plans ranging from the talking motion picture as a teaching film to be used in conjunction with lecture courses delivered by hospital staffs in the instruction of student nurses, to 'animated textbooks' that would provide entirely new approaches to many medical problems are now under discussion by leading hospital authorities. The facility with which the talking film lends itself to medical instruction can best be appreciated when it is understood that fifty student nurses watching a surgeon can see little more than their eyes and the position of their chairs permit them to see. On the film, close-ups can carry the spectator to the heart of the operation. The talking film gives the spectator a running lecture that outlines in detail the elements of the surgery.

"The applications of the talking film to the hospital are almost unlimited. Hospitals having a library of recorded surgery films will no longer have to rearrange their nurses' lecture schedules to fit the program of the operating room. Any type of surgical demonstration will be available at any time, accompanied by a complete lecture delivered by the surgeon who performed the operation. Nurses and student nurses can see the world's greatest surgeons at work, a privilege heretofore granted only to a select few. Attendants can learn the proper procedure of hospital routine through their favorite entertainment medium.

#### *Entertaining Convalescents*

"In the entertainment of convalescent patients, the portable talking picture projector will likewise play an important part. Fifty or a hundred patients can be assembled in a convenient room and the portable apparatus wheeled in and plugged into the light socket to produce an afternoon of enjoyable sound-motion picture entertainment. Patients will forget that they are in a hospital.

"In addition to its instrumental and entertainment value within the hospital itself, the sound apparatus will be useful in campaigns to raise money for the hospital. An appropriate feature film may be rented at a cost much smaller than that of the usual benefit dance or amateur 'show,' and it is easier to attract patrons to an entertainment of assured merit than to the most pretentious amateur performance."

# Physical Therapy in the Hospital— A Necessity, Not a Luxury\*

By NORMAN E. TITUS, M.D.  
New York City

SIX or seven years ago, it would have been difficult for me to comment correctly on the place that physical therapy holds in the general work of modern hospitals. To-day, however, great progress is being made in the evaluation of what physical therapy can do and departments of physical therapy are being opened in hospitals with increasing frequency. There has not been a month in the past year that I have not heard of at least two hospitals starting the organization of a physical therapy department. The spread of knowledge regarding this work will increase, and the time will come when hospital administrators who laughed at physical therapy a few years ago will, if they are big enough, admit that they were greatly mistaken.

Physical therapy is not a new method of treating the sick. In the seventeenth century books were written regarding the use of water and elec-

tricity for alleviating pain and treating disease. In years gone by certain men became interested in physical therapy and not realizing that all diseases have a tendency to get well without any treatment, became overenthusiastic as to the effectiveness of physical remedies and thus discouraged scientific thinkers from accepting physical therapy at its true worth and from realizing its value.

When the government had to assume responsibility for restoring to their maximum efficiency those wounded during the World War, the true value of rational physical therapy was discovered. Consequently, the effectiveness of physical therapy has received recognition since the war. Let me further state that a physical therapy department, although it should be individualized and run on its own budget, with its particular personnel, cannot be looked upon by the professional staff as being of independent importance. The science of physical therapy is to the science of

\*Read at the meeting of the Hospital Association of New York State, Coney Island, N. Y., May 8-10, 1930.



*In this well equipped physical therapy department in the Beekman Street Hospital, New York City, members of the city's police force have been given treatment.*

medicine and surgery what the clean-up squads are to the infantry they accompany into battle. The duty of these squads is to police the terrain and put the ground and surrounding country in better condition, thereby contributing to the success of a future battle. In like manner, physical therapy does not enter into the active medical or surgical treatment of patients. Although to a slight extent it might be a factor in acute conditions, its biggest field is in the work of restoring the diseased part or individual to normal. In that way physical therapy enables the patient to fight better the next battle with trauma or infection.

The success of a department of physical therapy depends, therefore, entirely upon the cooperation given to it by the other professional services of a hospital. The use of physical therapy in no way contra-indicates rational medical and surgical procedures. Though there is adequate cooperation between a hospital staff and the department of physical therapy, it is most important that these cooperating services refrain from trying to control the work of the department. It is regrettable that in many small hospitals the running of the machines and the giving of treatments are delegated to the head of the x-ray department. I believe that this is done mainly because the ordinary physician or surgeon, knowing nothing of electricity and switches and realizing that the roentgenologist does, thinks that of course he is the one to supervise the applications of physical therapy. A sufficient number of men are being trained and sufficient training is now available for those interested so that it is possible to provide qualified physicians who have an understanding of pathology and other medical subjects to direct departments of physical therapy. I believe that the chances of having a successful department of physical therapy depend largely upon having as director of the department a doctor who, though he may not have been greatly experienced in the beginning, with his modern medical training soon acquires an understanding of the subject.

#### *Personnel Is Important*

Many hospitals are attempting to run their departments by hiring young girls and placing the entire responsibility of giving treatments according to the directions of the attending physicians and surgeons, who themselves are ignorant of what physical therapy can do beyond what they learn from the salesmen who sell the apparatus. Such departments can never take the place they deserve in the general scheme of the hospital, and I wish to emphasize the fact that such work can-

not be successful without the direction of a competent, modernly trained medical director.

In watching the growth of many hospital physical therapy departments, I have noticed that they have all outgrown their space much sooner than was anticipated by those in charge of the hospital. No matter how much room is given the department of physical therapy, it is the first to outgrow its floor space. It is regrettable that most of these departments are placed in the basement, but of course in equipping them it is necessary to consider the expense of wiring and plumbing. Consequently, the nearer they are to the main switchboard and sewers, the less will be the cost of conducting electricity and water to the department. It is always well, however, to provide a means of access to the department for crippled patients so that they are not forced to walk up and down steps to get their treatments.

#### *Providing Mobile Equipment*

It is advantageous to provide a small room for the storage of portable apparatus for the bedside treatment of ward and private patients. This mobile equipment easily earns sufficient money to make such a space provision worth while.

In the professional picture of hospital service, it is surprising to find the number of fields in which physical therapy is of real use. Perhaps its greatest sphere of usefulness is in the treatment of fractures. It frequently has been stated that the worst term in the literature of fracture surgery is "after treatment." Ideally there should be no after treatment and any procedure that shortens this so far necessary period is distinctly advantageous. I have seen many patients with fracture of the humerus who have come from supposedly good hospitals where they have not been properly treated or advised to keep their hands and fingers in proper condition. Later on these patients go to some other hospital with a pitiful looking hand, with fingers ankylosed and with the skin in poor condition, for physical therapy, in an attempt to regain function, which sometimes takes years.

I recall one case of fracture of the surgical neck of the humerus in which the arm was kept thirty-five days in a Balkan frame because of delayed union. During that time the patient was not instructed to wiggle his hand and fingers and being of no more than the average mentality, he thought it imperative to keep his elbow, wrist and fingers as quiet as possible.

I worked on this man's hand for over three years before he was able to hold a pencil and write. When he was able to do this much, he grew tired of further treatment and was willing

to tolerate the remaining disability without further medical advice.

I can also recall a similar case treated in another hospital in which, though the actual period of inactivity was not so long, from the very day of injury the patient received massage and active and passive motion of his hand and forearm. As soon as the callus was firm, he received passive motion to the shoulder. When finally the arm was taken down from the Balkan frame, within one week he had perfect function of the entire arm and hand.

In a few cases such as these, treatment by a masseur is sufficient to obtain satisfactory results. In fact it has been stated that with the use of conservative and expert massage and exercise, the convalescent time ordinarily expected in such cases can be shortened fully one-half. In cases of fracture of the femur in old people, the patient should not be allowed to develop bed sores and other conditions, even hypostatic pneumonia, because the fracture surgeon cares only for the fracture.

In one of the hospital physical therapy departments that I have directed, it is a routine procedure that on the admission of any patient with a fracture the department is immediately

notified. If one of the attending directors cannot see the patient that day, the chief technician starts a conservative form of physical therapy so that nothing is done that might injure the surgical result. When elderly patients are to be confined in bed for some time, they receive at least two general body massages each week, as much of their skin as can be touched being treated and the general circulation thus stimulated. If they are in poor condition, they are also given baths of ultraviolet light over the entire body for the tonic effect. I can cite hundreds of cases in which I believe the failure to use physical therapy almost constitutes grounds for suit for malpractice. Considering the 15,000 patients I have seen, I believe this statement is not unwarranted. I do not claim that physical therapy is a cure. It is only a member of the team that cooperates to produce more perfect results.

I am reminded of the incident that occurred in the inspection of a physical therapy department during the war when the major in command, on being asked to produce some end results for the board of officers, said, "Why, gentlemen, the department of physical therapy contains nothing but end results, wished on it by the other services." That is what is one of the curses



These patients are receiving various light and vibratory treatments in the physical therapy department of the Tacoma General Hospital, Tacoma, Wash.

of any department of physical therapy. It takes a long time for the medical and surgical staffs to realize that physical therapy can be easily instituted in the treatment of many conditions. It is disappointing, for instance, to see a patient with a sprained ankle come to the department who after having had his ankle strapped up for two or three weeks by orders of the surgical service, has developed a slight ankylosis, when, if he had been sent to the department the first day, he might have entirely recovered and been back to work within two weeks.

Patient's with Bell's palsy are sent to the department for treatment who for a month or more have been receiving strychnine and sugar-free or salt-free diets or other theoretic and empiric forms of treatment. It is easy to treat a patient with acute Bell's palsy and produce full restoration of function in less than two weeks. This cannot be done, however, when the patient has received other forms of treatment and been kept at home for a long time and then sent to the department for some foolish physical therapy that the neurologist thinks might hasten restoration of function.

#### *Some Uses of Physical Therapy*

Bronchitis, for instance, responds well to medical treatment. When the patient with acute bronchitis comes to the clinic it is not a poor procedure to give him a prescription for an expectorant and tell him to go home and take a physic and continue the medicine. However, if the medical staff would send this patient to the department of physical therapy immediately, frequently a single dose of ultraviolet light will help and diathermy given to the chest will distinctly aid in shortening the course of the disease.

Varicose ulcers are the bane of any surgical clinic. Though all sorts of treatments with ointments are tried, they last for years and the patients are unable to work. The application of the static effluvium will accomplish more in one treatment than five pounds of any ointment I have seen. This application combined with the rather new but accepted treatment for varicose veins has produced results in these conditions that even ten years ago were beyond the expectations of all physicians.

Cubicles of curtains provide the most sanitary arrangement for this department but these curtains do not have any place where hooks can be fastened, on which the patients may hang their clothing. It is therefore advisable to have the partitions of wood extend about two feet out from the wall, with curtain rods reaching out and around from these partitions. In a department

that has a limited number of machines, time is saved if the partitions begin three feet out from the wall, making a passageway from cubicle to cubicle along which apparatus may be moved without exposing the patient from the foot of the cubicle. This also provides a way of observing one or more patients without exposing them too much.

#### *Keeping the Records*

It has been found best to have the entire record of each patient sent to the department whenever an examination is made by the attending doctor. This gives the doctor a chance to check former notes and make his notations directly on the permanent record. In the department with which I am associated, it is a set rule that no patients are admitted originally. All cases must be studied and diagnosed before they are referred to the department of physical therapy. Thus a great deal of time is saved in not having to examine patients referred to the department. When it is felt that a patient has received sufficient treatment, he is sent back to the department from which he came for a final discharge note before leaving the clinic. None of the directors of the department of physical therapy ever writes a prescription for a patient and when other conditions arise during a course of treatment, the patient is always referred back to the original clinic for examination and prescription. Treatments are confined to physical therapy so as to interfere as little as possible with other doctors' ideas of general treatment. However, should an occasion arise when it is felt that a helpful suggestion can be made, the record is obtained and the suggestion is noted and signed on the patient's permanent record.

#### *Patients Must Be Followed Up*

It is always a good plan to follow up patients every two or three weeks, but it is a problem to induce patients who seem to be enjoying their poor health to come back for a reexamination by the doctors in the department. This must be watched, because the patients will often fail to keep an appointment with a doctor or they will slip out rather than be referred back to their clinic to be dismissed as cured.

I should like to emphasize one point in regard to planning a department of physical therapy. It is possible that some of the hospital personnel may go into the department during the night and cause serious damage to the apparatus. It is therefore wise in placing the wiring to have one main feed wire go into the office or, if the department occupies only one room, to a central loca-

tion. This feed wire then supplies the fuse box from which all circuits for power are led. The incoming circuit should have a large knife switch and at night when the technicians leave, this switch should be thrown and the fuse box locked. This not only provides protection against the running of the apparatus while the department is closed but is also a good fire protection.

The question of supplies is also one to be considered. The laundry bills are naturally high. In an effort to combat this drain on the budget, successful use has been made of crêpe paper sheets which can be obtained in pads of twenty-five, sewed at the top and bottom. When a treatment is finished, the patient tears off his own sheet and throws it into the waste paper box. The cost of these paper sheets is much less than that of laundering a regular sheet and naturally the interest on the original investment of equipment is an item. Except for treatment during which these sheets might get wet, their use is extremely economical in a department of physical therapy.

#### *The Technician Must Be Well Trained*

I should like to stress the importance of having a chief technician who is well trained in physical therapy and who is responsible to the director as a house surgeon is to the attending surgeon. All treatments cannot be supervised by the director in charge and it is consequently necessary to have as technician some one in whom implicit faith may be placed.

For the past six years the members of the New York Police Department have been given physical therapy at Beekman Street Hospital and Vanderbilt Clinic under my direction. The results obtained in getting these men back on duty more quickly have evidently been so impressive that there is now in course of construction at police headquarters one of the most complete departments of physical therapy in the city. Of course the treatment that these policemen received could be given only in the out-patient department. If that proved so valuable, is it not clear that work done in hospitals on ward cases will shorten the length of stay of many patients? For the general usefulness of any hospital the shorter the average length of stay of its patients, the greater the annual turnover. Undoubtedly, physical therapy has to-day proved itself a distinct aid in shortening convalescence and consequently it is a necessity in the general scheme of a hospital and not a luxury. With proper co-operation of other services the department can always be made to show a profit, so that both financially and professionally it should be a help.

#### A Doctor Tells His Life Story\*

"The Story of San Michele" is the autobiography of a famous Swedish nerve specialist. Dr. Axel Munthe, the author, has led a life of high adventure and the story of his career abounds with dramatic episodes, both tragic and ludicrous. He is a born story-teller with a vivid imagination and to this he adds a style of writing that is picturesque and arresting.

With sympathetic touch he tells of the suffering and woe he met face to face in the famous old hospitals of Paris—La Salpêtrière, Hôtel Dieu, La Pitié—where as a student he spent days and nights wrestling to salvage human lives, working side by side with the sweet faced Sisters, until one day a hard-won diploma crowned him "the youngest M.D. ever created in France."

In mocking vein he hits off the foibles of his wealthy patients, *les malades imaginaires*, who when he had risen to fame and fortune as a fashionable doctor, flocked to his door in the Avenue de Villiers, armed with interminable lists of symptoms.

His grim struggle with the horrors of cholera ridden Naples is recounted with terrifying realism. The story of his association with the celebrated Charcot, first as his pupil and later as his co-worker at La Salpêtrière, is of absorbing interest, dealing as it does with the startling phenomena of hypnotism and telling how he first came to question the soundness of Charcot's theories on hypnotic treatment, thus bringing upon himself the furious resentment of the Master and ultimately leading to a complete break between the two.

This is the story of a brave man who takes hold of life eagerly with both hands and plays his part nobly in many a drama of life and death. It is written in racy and somewhat erratic fashion. Sorrow and joy are intermingled in the incidents related, humor and irony lend their aid in making the book of irresistible appeal. Woven into the tale are legends and folklore that capture the imagination.

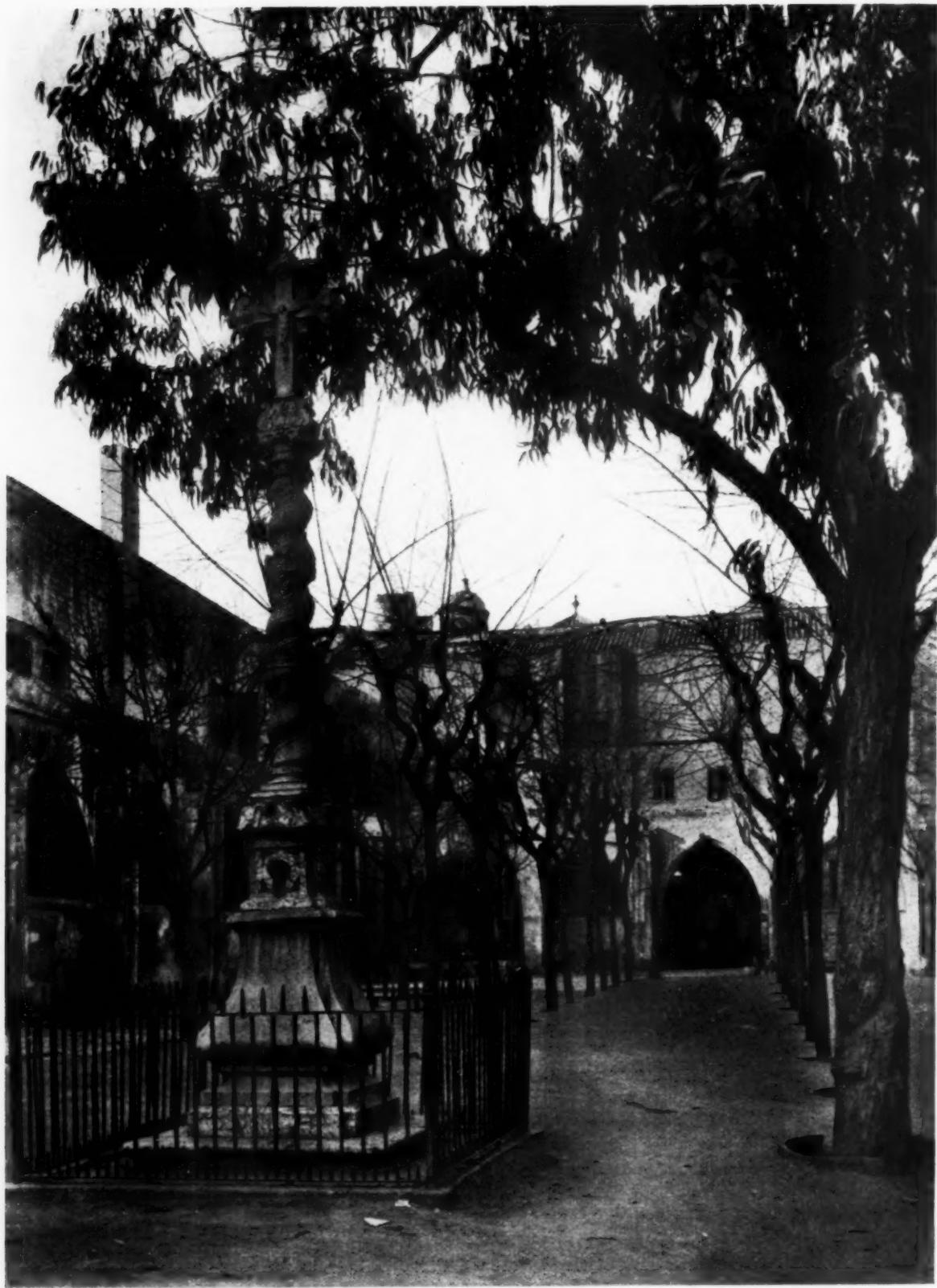
Most fascinating of all are the pages that describe his days on his beloved island of Capri. A lover of Nature and a lover of all creatures of earth and sky, he sings of them in prose that has the melody of poetry. It is on fair Capri that we first meet him, young, gay, debonair, and it is there we leave him, old, weary and longing for rest as he nears the end of the River of Life.

This brilliant book, with its alternate comedy and tragedy, cannot fail to interest all in any way associated with the medical profession. It is informative, it is diverting and its imagery is a delight.

#### Getting Hospital Costs "Out in the Open"

In an attempt to get all hospital costs "out in the open," the University of Chicago Clinics are trying a new experiment that deals with the compensation of workers, says an article in the *Educational Buyer*. Instead of paying workers a modest salary and then supplementing that by free board, room and laundry, the clinics plan to pay for all services in money only and then to rent whatever rooms are available at the current rate and to operate a pay cafeteria for the doctors and nurses and a separate pay cafeteria for the other workers.

\*Munthe, Axel, *The Story of San Michele*, E. P. Dutton & Co., Inc., New York.



*This Spanish Courtyard* is surrounded by the ancient buildings of the

*Hospital de la Santa Cruz, Barcelona, Spain. The hospital was founded in 1229 and cared for the sick during the Middle Ages and the Renaissance. In 1638 the present building was erected and some of its wards are still in use.*

# How Early Shall We Awaken Our Patients?

By MILDRED CONSTANTINE, R.N., A.B.

Formerly Principal, School of Nursing, Montefiore Hospital, New York City

THE early hour at which hospital patients are awakened has been the subject of recurrent criticism by doctors and lay persons. Although the patients themselves have rarely complained, the nursing profession has frequently discussed the advisability of recommending a change in the awakening hour, but little has been accomplished. We have hesitated to disrupt the service in our hospital by radical changes as long as dissatisfaction was not more general.

Hospitals have argued that the early hour of awakening patients was justified because the rounds of physicians and the routine of the operating room required that ward routine be complete at an early hour. For many years it has been our custom to awaken patients between 4:30 and 6 a.m. so that they could be ready for breakfast at 7. This was obviously a convenience for the medical and nursing staffs and it was just as obviously an inconvenience for the patients. The hour at which patients were awakened varied on each ward according to the number of patients, and particularly according to the number who had to be helped to dress. This system made it necessary for the lights to be turned on in some wards as early as 4:30 a.m. and although all the patients were not required to get up, they were annoyed by the disturbance resulting from the activities of others in washing and dressing. This seems to be the routine in most hospitals.

#### *What London Is Doing*

In the November 2, 1929, issue of the *Lancet* under "Annotations" there appeared a short article on the time for awakening patients at the Middlesex Hospital, London. According to this statement, the day nurses' schedule was changed so that they were required to report for duty at 6 a.m. instead of at 7. By this rearrangement of hours and work the hospital found it possible to allow the patients to sleep until 7 a.m., if they so wished.

Encouraged by this article we began to study the problem here from a new point of view. Our chief concern was not how much trouble the

change would create for the staff, but how to carry it out with the greatest comfort to the patient. As we felt that the nurses were up early enough under the present schedule, we were averse to changing the hours of duty. We finally decided to attempt a solution of the problem by a readjustment of the schedule of duties only, without changing the hour. The wards that had the largest number of ambulatory patients were selected for experiment. We began on our tuberculosis wards because about half of the patients there are ambulatory and when they awaken they go to the washrooms and then to the dining room. We found that the day nurses, who report for duty at 7 a.m., could easily wash the bed patients in fifteen to twenty minutes before the breakfasts were served, between 7 and 7:30. This arrangement permits patients to sleep until 7 a.m. if they wish.

#### *Advantages of the System*

In this hospital, which cares for the chronically ill, we have many patients who are able to sit up in wheel chairs for a short time each day, and it has seemed best for the morale of these patients as well as for the routine of the ward to have them get up for breakfast and then go back to bed at about 9 o'clock or after dinner, according to the length of time they are able to be up.

The diets are brought to the wards in food conveyers and the hot dishes transferred to the steam table where they remain for at least fifteen minutes, to be reheated before serving. During this time the bread, rolls and butter are placed on the trays for bed patients and in the dining room for ambulatory patients. Those of the staff who are not assigned to the distribution of the bread take care of the patients. Day nurses on the tuberculosis wards find little difficulty in caring for bed patients between the time they come on duty and the time breakfast is served.

The experiment proved that by the new arrangement we were able to secure better supervision of the morning toilet. The breakfasts

were hotter, and although the patients at first complained because of the change in their routine, they gradually became accustomed to the later hour and both nurses and patients were better satisfied.

In the November 23 issue of the *Lancet*, H. J. Say, secretary of the London Fever Hospital, wrote briefly. "By a slight adjustment, the hours of duty for the nursing staff have been lessened, and all patients are allowed to sleep until 7 a.m." Encouraged further by this report and by the way the patients and nurses coordinated on the tuberculosis wards, we decided to extend this new arrangement throughout the hospital immediately instead of to one ward at a time as we had originally planned. After a few days we found that the work assignments on some of the wards needed minor adjustments. Some of the work, such as setting up trays, was transferred to the night staff. In the beginning many of the patients on the medical and surgical wards complained that the continuous effort required for washing immediately before their meals was too much and that they were unable to enjoy their breakfast or eat as much as they would like, since they were deprived of the intervening rest period which they enjoyed under the previous routine. Other patients liked the old system better as they were asleep by 9 o'clock at night and awoke early.

Under the revised schedule which distributes the work of the night staff more evenly, we found it possible to eliminate one night employee. Some of our wards have two and three nurses or orderlies on night duty, and it is also possible, now that the peak of the work curve has been flattened, to send help to certain other wards for the distribution of bedpans and for other duties.

#### *How Oral Hygienist Cooperates*

At the same time that this system was inaugurated we employed an oral hygienist, who confers with the patients about the care of their mouths and cooperates with the nurses to see that all the patients have their teeth properly attended to. For this purpose the hygienist makes the rounds of the wards between 7 and 7:30 in the morning.

The only disadvantage of the new system is that the day nurses' morning work is somewhat increased. In a hospital where medical rounds are started at 9 a.m., it might be difficult to complete the ward work before rounds but, as this system is much more fair to the patients, we feel that it is satisfactory and should be adopted in more hospitals. The rest is a matter for readjustment and cooperation on the part of the medical staff.

#### Department Heads Should Have the Trust of the Superintendent

Is the policy of requiring departmental heads to sign their names in a registry book when they leave the hospital humiliating or unfair to them?

No procedure should be adopted in the hospital that tends to throw an atmosphere of suspicion about the activities of any of the departmental heads. The superintendent of a hospital who is required to adopt schoolboy tactics in order to keep informed of the whereabouts of his departmental heads should either replace such officials with others more trustworthy or else he should examine his own mental makeup in an endeavor to learn whether any reason for such a lack of dependence in his personnel exists there. Basic rules of organization demand that departmental heads be selected with the greatest of care but, once chosen, they should be given full authority over those persons working under them. In addition, they should receive the whole hearted confidence of their superior officers until they have proved unworthy of such trust. Hence, it is assumed that none will absent themselves from the hospital without a good and amply sufficient reason.

Picayune policies in the administration of the hospital result in the lowering of morale and a consequent lack of initiative and of efficiency in the treatment of the sick.

#### Why Radiology Should Be Recognized as a Specialty

Recognition of radiology as a medical specialty and placing it under the direction of physicians trained in its use are the essentials in the development of this new science, in the opinion of Dr. H. J. Ullman, director, department of radiology and cancer research, Santa Barbara Cottage Hospital, Santa Barbara, Calif., who addressed radiologists at the annual Congress on Medical Education and Hospitals of the American Medical Association. Doctor Ullman's subject was the requirements of a department of radiology in a small hospital.

A competent director should be obtained before a department is installed since the person who is to use the equipment should decide what is needed. The amount and type of equipment depend on many outside factors such as the size of the community, the type of work to be done and the facilities already available in the neighborhood. It is economically unsound to have several large outfits operating when there is only enough work to keep one machine running, Doctor Ullman declared.

Doctor Ullman called attention to the seriousness of prescribing and applying radium treatments. There is no greater tragedy, except incompetent surgery, than ignorant or careless use of radium, he said, especially when it is combined with the roentgen ray. Treatment is unsafe unless the entire dose is prescribed by a physician who knows what he is prescribing and why.

Ultraviolet ray generators are not usually included in the radiology departments of hospitals, but Doctor Ullman believes that these treatments should also be under the direction of the radiologist rather than a technician who is not a physician. He also registered a protest against indefinite orders for treatment. An order such as "quartz lamp, ten minutes twice a week," could result in anything from almost no effect to a severe burn, depending on the distance, age of the lamp and various other factors.

# How to Keep Accurate Case Histories\*

By JOHN OSBORN POLAK, M.D.  
Long Island College Hospital, Brooklyn, N. Y.

THE hospital case history should be a complete record of the patient's illness and should include: (1) the subjective story as told by the patient; (2) the objective signs obtained by a complete physical examination; (3) laboratory records; (4) a detailed description of any operative procedure; (5) the pathologic findings; (6) daily follow-up notes as to progress; (7) the record of the condition on discharge; (8) x-ray plates, photographs and the autopsy report. The omission of any of these essentials always leads to trouble.

What can be obtained from the patient's story? Proper attention must be given to the chief complaint and the sequence of symptoms, for all diseases present a clinical picture that suggests the working diagnosis. This story may be misinterpreted, but if correctly recorded it will nearly always lead to the presumptive or working diagnosis.

## *Interpreting the Symptoms*

A presumptive diagnosis is made on the suggestive symptoms and characteristic signs. Laboratory aids are only confirmatory and should not be depended upon for any other purpose. So significant is the sequence of symptoms that the late John B. Murphy, in a study of 2,000 cases of appendicitis, found that the sequence of symptoms resulted in a positive diagnosis in 1,998 cases. The sequence of symptoms in this disease is: (1) a sudden attack of abdominal pain, usually referred to the region of the umbilicus; (2) nausea and vomiting; (3) local tension and tenderness; (4) temperature, and (5) leukocytosis. When these symptoms or signs occurred in any other order a diagnosis of appendicitis was doubtful. The colic, vomiting and pain referred to the right lower quadrant were suggestive. The tension and tenderness in the right side of the abdomen were characteristic, while the temperature, leukocytosis, polymorphonuclear count and low sedimentation time were confirmatory.

In fracture, too, the history of injury with in-

ability to use the limb suggests the diagnosis. Preternatural mobility of the fragment and the crepitus are characteristic, while the x-ray picture is confirmatory.

To be complete the history must include all of the patient's story. Deletion is not necessary and the orderly sequence of events is imperative. To estimate this, 200 medical and surgical cases in which a good clinical history (story) was recorded were taken and a presumptive diagnosis set down. No physical or laboratory tests were made and the result was checked by operation or autopsy. A correct diagnosis was made in 85 per cent of the cases.

As a contrast to these cases, 200 case examinations were made and no histories were recorded. Complete physical examinations were made, every known laboratory test was used, the findings were interpreted by the same group of clinicians, and but 61 per cent of the diagnoses were correct.

Acute intestinal obstruction presents such a clinical story that no laboratory tests are necessary to make a presumptive diagnosis. Pain and sudden severe abdominal colic, vomiting, blocked bowel, visible peristalsis, and no fever make up a symptom complex that even the tyro should know, yet lives are lost by delay in sedimentation or in x-ray examination.

## *What Histories Should Tell*

Photographs of deformities and of the progressive changes made in this connection should be a part of the history in all traumatic cases or in orthopedic cases in which correction is tried. Likewise, all laboratory data, signed, should be a part of the history. Progress notes by the attending physician are of vital importance. For instance, it is not uncommon to find a fistula of the abdominal wound continuing for weeks because a drain or a silkworm gut suture has not been removed or part of it has been cut off. Careful inspection by the attending physician and note of such inspection may save him and the hospital many thousands of dollars in damages. Attending physicians are often lax in insisting that all

\*Read at the meeting of the Hospital Association of New York State, Coney Island, N. Y., May 8-10.

of these details be included in the record. They are necessary, however, for the good of the patient and for the protection of the physician and the hospital. This complete record gives the referring physician the necessary information for intelligent after treatment of the case and it establishes friendly relations between the outside physician and the hospital.

How long should histories be kept? This depends on the type of illness, the accident, the operation and other things. Medical records need not be kept for so long a period as surgical and compensation records. The latter have a future bearing on the patient's after life, not only in a medical sense but because of their legal bearing. Ten years seems to be a safe period for preservation, though when histories are properly bound and filed they may be easily stored and kept to advantage indefinitely. All records should be reviewed by some one specially designated for this service, usually a junior staff member. Omissions should be noted and inserted at weekly staff conferences. No history that is incomplete should be filed, and each history when completed should be checked by the attending physician. This fixes the responsibility and keeps everybody on the service on the alert.

To whom does the history belong? There is but one answer to this question. The history is the property of the hospital. Each history should be filed, indexed, cross indexed and preserved. No history should under any circumstances be removed from the record room unless a subpoena to that effect is issued by the court order. Nurses and interns must be instructed not to give information contained in the history to family or friends. An abstract may be sent to the referring physician, since it helps to make the records more complete.

### What Is Hourly Nursing and Who Should Have It?

Since there are so many definitions of hourly nursing and the term is used so carelessly in many instances to cover several types of nursing service, the following definition from the "Tentative Standards for Hourly Nursing," which have been developed at the American Nurses' Association headquarters should be helpful:

"Hourly nursing, as we know it to-day, is a form of intermittent nursing, designed primarily to meet nursing needs for patients sick in their homes. Its organization may become elastic enough to offer to hospitals and to doctors for their office practice, nursing on a part-time basis. Its objective should be a service available for every type of nursing need not now being met in the community on a twenty-four hour a day basis. This objective, it is realized, cannot be attained until the volume of work permits a cash reserve for organizing the more expensive

night work. It needs to be kept in mind, however, that patients in their homes, like patients in hospitals, need a certain amount of nursing care at night, as well as in the day. This service should be on a par with day service."

Hourly nursing service can find its place, states the report, first in meeting the needs of the patient ill in his home or hotel who does not need continuous service, but who is benefited greatly by one, two, three or more hours of nursing care daily or weekly. It is meant, primarily, for the patient in modest circumstances, but it should include anyone in the community in need of this service.

Among the types of cases cited in this group are maternity cases, either those delivered in the home or those newly discharged from hospitals; acutely ill cases, such as influenza, where the condition of the patient does not require continuous care or supervision; treatment cases, insulin and other hypodermics; colonic irrigations; surgical dressings for postoperative and accident cases; chronics and convalescents.

Hourly nursing service is designed to meet the needs also of the hospital which in emergency or during peak load periods finds it difficult to provide relief for special duty nurses; and for the doctor, both in his practice in the home and in his office, who frequently needs a nurse to aid him in minor operations and emergency cases.

### Many Communities Still Face X-Ray Film Hazards, Says Radiologist

Fire and explosion from x-ray films in a hospital filled with bedridden patients is unthinkable, yet in spite of the frightful Cleveland Clinic disaster last year many communities are still as open to this calamity as they were before, Dr. P. F. Butler, radiologist at the Boston City Hospital, declared in an address before a meeting of radiologists at the annual Congress on Medical Education, Medical Licensure and Hospitals of the American Medical Association.

Safety film costs about 20 per cent more than the highly explosive nitrate film, but the added expense is good insurance against fire and explosion, Doctor Butler pointed out. This safety film is no more dangerous than so much office stationery, he said.

In this connection, Doctor Butler also called attention to the ever present dangers to workers with x-rays and radium. Patients having x-ray photographs made for diagnosis receive such small amounts of exposure that there is practically no danger, but patients receiving treatment and workers must be carefully protected.

Long vacations and frequent blood tests must be given to workers in this hazardous occupation, Doctor Butler declared. Safety measures for those working with the x-ray include: lead lined booths for operators, lead glass bowls for tubes, lead enclosed tubes, ample distance of tube from operator, good ventilation and sunlight. Radium workers face different problems and must be watched for signs of breakdown in health.

Needless x-ray examinations are a source of great waste of time and material. Doctor Butler believes that a large percentage of examinations are unnecessary and in many cases could be avoided by more careful diagnosis.

He also spoke of the need for recognition of the radiologist as a medical consultant. Physicians not in touch with good radiologists have an idea that the work consists mostly of picture taking and that anyone can read a roentgen ray film, whereas the interpretation of it requires a high degree of skill.

# Practical Administrative Problems: Helpful Ideas on How to Run the Out-Patient Department

By JOSEPH C. DOANE, M.D.

Medical Director, Jewish Hospital, Philadelphia

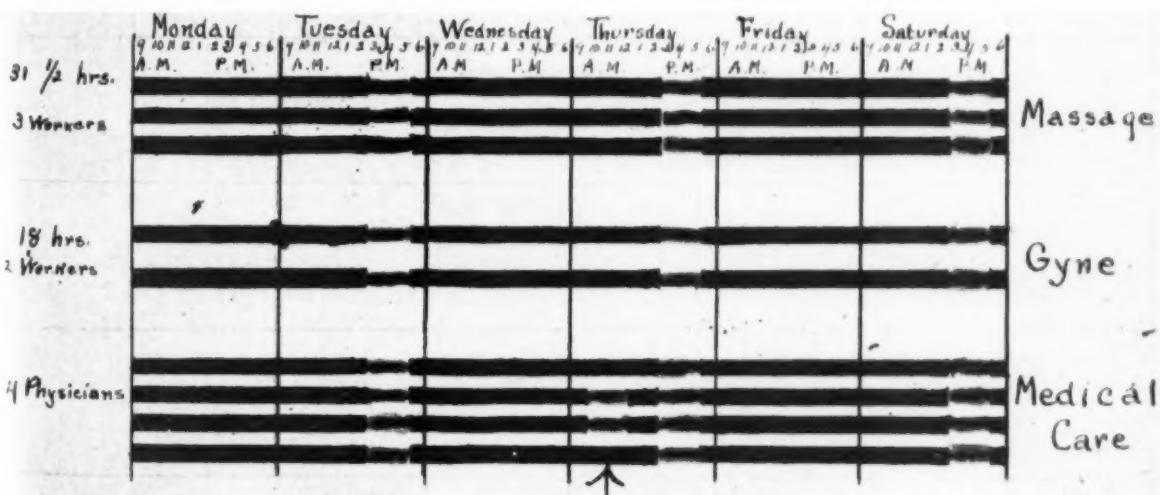
THE out-patient department of the hospital is an activity that has had a difficult and uncertain metamorphosis. It was the idea of those who began it to reinspect from time to time the most interesting patients who had been discharged from the hospital. From such a beginning, the dispensary, or in more recent terminology, the out-patient department, has developed in many instances into an efficient and indispensable part of the service to the sick.

This is, however, not wholly true in perhaps the majority of the hospitals in the field. While almost every institution that makes a pretense of rendering a complete and efficient service to those who are ill, possesses some sort of return clinic, yet it is more and more evident that the possibilities of this work are still to be visioned. Moreover it may be said that the out-patient department of the hospital is as important to the welfare of the community as a whole as are the facilities for the care of patients in wards and rooms. That this fact is not recognized is patent to all those who are informed.

No general agreement exists as to the term most descriptive of this effort. The "out-patient department," "dispensary" or "clinic" represents perhaps the most common terms—loose though they may be—that have been employed in re-

ferring to this type of hospital service. The term "dispensary" perhaps can boast of the earliest usage. Indeed in 1786, the Philadelphia Dispensary, which represents one of the earliest efforts in the United States to serve ambulatory patients, employed this term to signify the fact that it was prepared to issue or dispense drugs to those who needed them. Still clinging to the term "dispensary" is the implication that the distribution of medicine is the main activity characterizing this work. Even to-day the Philadelphia Dispensary, full of years of service and of honor, with its board of trustees and with certain funds existing as endowments, is in existence although, due to the exigencies of the time, it has merged with another activity. It is not easy to discover a better term than "dispensary" to describe adequately an organization not connected with a hospital that cares for ambulatory patients and in this article I shall use the term occasionally in this sense.

The term "out-patient department" is the term perhaps most frequently used. This title, moreover, is accurately descriptive insofar as it differentiates an activity that purports to serve persons who are ambulatory and who may return to their homes after treatment, in contradistinction to patients temporarily resident.



Graph A. Time arrangement of a Western hospital's out-patient department. The black bars indicate unused hours of the department's space; the shaded areas, hours of space used, and the arrow, a period that does not include a monthly neurological clinic held from 9 to 11 a.m.

The term "clinic" implies to most persons the existence of an educational effort. Indeed, through usage a clinic has come to represent a collection of students who have gathered to witness a surgical operation or to listen to an exposition on a medical subject which is illustrated by the presence of one or more patients. It would be no less accurate perhaps to describe a clinic as consisting of one or more patients who were studied by one or many students in medicine.

#### *Growth of the Dispensary Movement*

Nor is it my intention to imply that the out-patient department of the hospital should not be educationally of the greatest value to undergraduate and postgraduate physicians.

Since the latter part of the eighteenth century, there have been in existence organizations that have successfully furnished free medical care to patients who did not require the bed service of the hospital. Indeed, in the past century, with greater frequency than is now the case, here and there an effort of this sort was made which was entirely detached from a hospital. Then hospitals were fewer in number and dispensaries were more numerous. But in the past few decades there has been a strong and at the same time an easily explained trend for the detached dispensary to seek an affiliation with a hospital which could supply specialty and consultation services not available under the original plan of operation. Philadelphia, for example, has seventy-one "dispensaries," fifty-one of which represent out-patient departments of hospitals. Two are unattached and twelve are associated with health or settlement centers. It may be seen, therefore, that with the change in plan of operation, there has come a necessary change in terminology, and the former "dispensary" has been transformed into a distinct institutional department.

Yet, even with these changes, the out-patient department is in many ways literally well named. It frequently may be found in an out-of-the-way place, lacking proper facilities for the examination and treatment of the sick and even being situated so inconveniently that patients have difficulty in reaching it from the thoroughfares adjacent to the hospital. It often is out of the scientific zone of the hospital in that inadequate and unmodern practices are carried on there. It just as frequently is out of direct communication with the in-patient service, because of a lack of coordination between the result of studies carried on during the ward stay of the patient and the information available to those who are required to supervise the patient's medical life

after he is discharged. The intended implication in the preceding statement is that this disassociation between the in-patient and the out-patient services of the hospital frequently has a direct bearing upon the type of medical organization under which they are conducted. Visiting chiefs are often too busy or consider themselves too experienced to give any of their time to the out-patient department. On the other hand, there are outstanding exceptions to this rule. All too rarely, yet with sufficient frequency to be heartening, does one observe distinguished physicians who feel the importance of this department and who are willing to spend a part of their time performing out-patient work.

Finally, as has been intimated, this activity is sometimes out of connection with any hospital at all. It would seem, however, that the modern trend is for men and women to desire more and more to patronize those dispensaries or clinics that are connected with hospitals. It is a significant fact that the clientele of this type of department is rapidly climbing, while that of the unattached dispensary seems to be declining.

#### *Five Fundamental Standards*

The out-patient department, too, has developed in many instances into a medical-social center from which emanates into the community definite and desirable information relative to better and more sanitary living. This sketch will, therefore, concern itself only with that type of out-patient effort that is definitely integrated with a hospital organization. One of the difficulties relative to the administration of this important service is the fact that many institutions do not recognize the importance or necessity of standards of organization and service. In 1927, the American Hospital Association adopted as a general guide for the conduct of out-patient departments five fundamental standards. These statements implied:

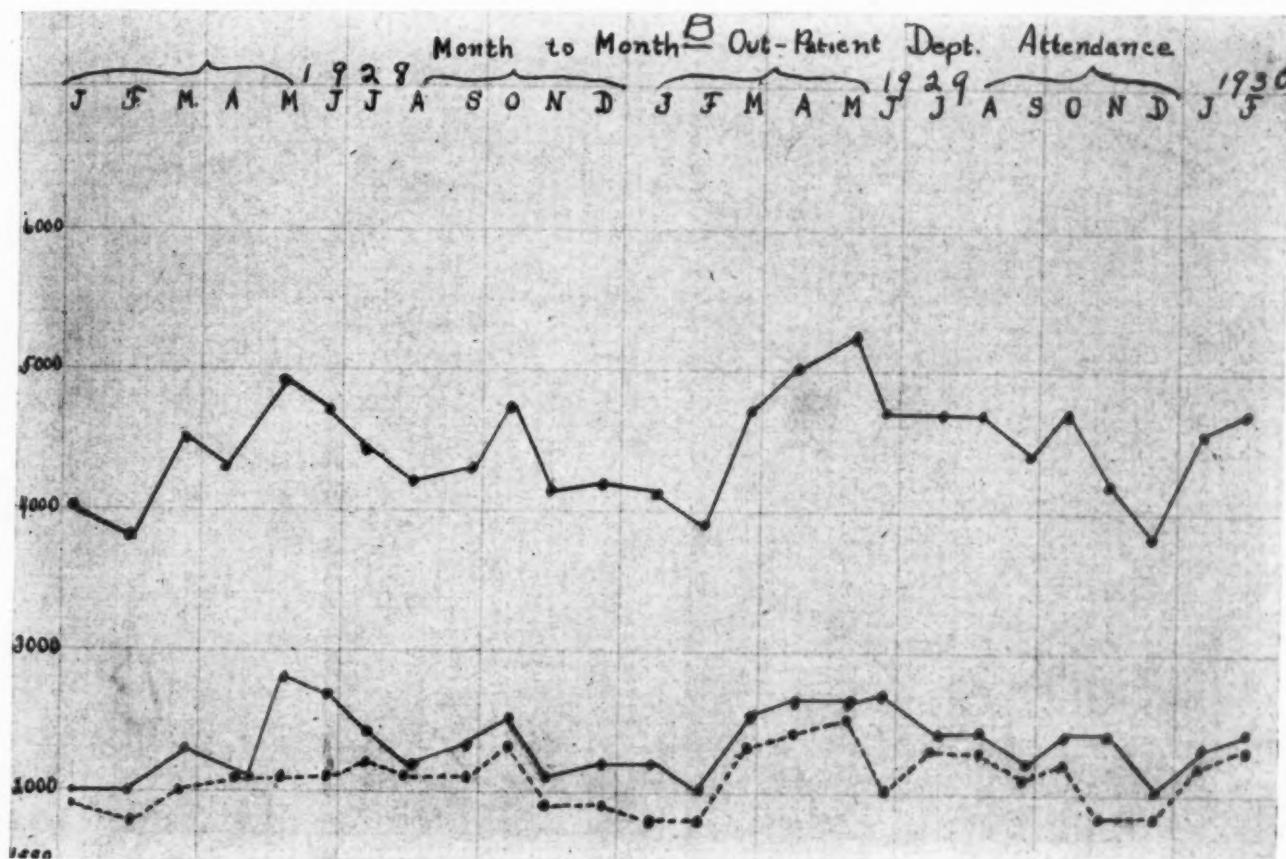
1. That the out-patient and in-bed services are intimately associated phases of hospital work.
2. That the number of patients accepted for treatment should be determined by the available facilities as to space, equipment and staff.
3. That adequate records should be maintained and properly filed.
4. That efficient laboratory service should be available.
5. That all those specialty services, including social service, proper nursing, clerical and other necessary aid should be provided.

Insofar as the administration of the institution is concerned, it is of the most vital importance that the board of trustees should recognize the

importance of the out-patient service. This attitude is none the less necessary on the part of the superintendent, the medical staff and the nursing and other specialty departments. Too frequently it is the feeling of the board of trustees that anything is good enough for the out-patient department. This conviction is evidenced by the absence of an active and understanding board committee on out-patient work. Again, it is feared that the attitude of the board of trustees is too often that the out-patient department must

directed to instances, such as the one narrated in the following paragraph, as an evidence of the actual money saving possibilities of this work.

In a certain institution in the East which, because of certain economic and social reasons attached to this type of case, has been in the habit of accepting maternity patients from two to six weeks prior to the date of their delivery, a prenatal clinic was organized. It was found through the activities of this group that the average number of waiting patients which hitherto had been



Graph B. Here are shown the peak and low level of out-patient attendance of three Eastern hospitals.

pay for itself in the coin of the realm, overlooking the important fact that the less tangible, but just as valuable preventive medical service is equally as important if not more important than the mere financial return from dispensary fees. The attention of boards of trustees who are uninformed or unsympathetic with this type of work should be called to these facts—that it represents money as well as life saving to keep patients well, and that a well conducted department of this sort must and does prevent hospitalization, thus preserving beds for the use of those who are more seriously in need of their service. A well conducted out-patient service cannot avoid producing a more prompt turnover in the use of hospital beds than would be possible in its absence. The attention of board members should certainly be

twelve was reduced to two and that a three weeks' in-patient stay was avoided in each instance. It is a simple arithmetical process to compute the amount of money at \$3 a day which this single dispensary saved.

The superintendent of the hospital often allows the out-patient department to pursue the course of least resistance. His rounds of inspection are likely to be less thorough and less frequent than in the wards and rooms of the hospital proper. He often permits the appointment, without protest, of the youngest and most inexperienced members of the staff for service in this department. Too frequently, he overlooks the presence of poor equipment or allows worn out supplies and instruments to gravitate toward the out-patient department. He looks askance at any re-

quest for the expenditure of money here. When the desirability of initiating new public health activities is broached by an enthusiastic physician, social worker or nurse, he gives scant attention to such proposals.

The staff of the hospital cannot be exonerated in too many instances for the failure of the out-patient department to render its fullest measure of service. There are in existence two general plans of staffing this work. In one instance, the out-patient department is considered as a definite adjunct to in-patient services. The visiting physician or surgeon is not only nominally but actually in charge of this work. He gives generously of his time to this department. He is inclined to require his assistants to spend a portion of their service each year in the out-patient department.

The second scheme contemplates the existence of a distinct out-patient staff with no definite connection between this and the in-patient group. There may be a chief of the out-patient departmental staff who requires meetings of his group from time to time and who, in this way, is carrying on a commendable and efficient service.

Yet, it is impossible to draw any clear-cut line that sharply divides the medical life of the patient into a few weeks' hospital stay and a longer period that may consist of many weeks or years of ambulatory treatment. It cannot be said with too much force that the hospital is realizing but a fraction of its service potentialities to the sick if it is not able or willing to follow and to supervise efficiently the activities of its patients, whether they are temporarily confined to a ward bed or are endeavoring partially or wholly to surmount medical handicaps at home.

#### *The Department Should Be Easily Accessible*

If patients who have been treated in a certain ward service are lost later in a maze of complicated procedures and reach another service, or fail to come under the notice of the out-patient service, the fault can frequently be laid to organization defects. Or on the other hand, a patient who has been fully studied in the out-patient department and who eventually is admitted to the hospital without the knowledge of the former and without costly and painstaking records following him there, is not receiving the service he deserves. Moreover, a great waste of time and money takes place when serologic, bacteriologic, x-ray or other data which have been laboriously accumulated in the out-patient department are not made available to the physician.

Too frequently it may be said that the ward physician refuses to accept the records that have been compiled by competent out-patient observ-

ers. Perhaps this difficulty would be obviated if the first contact could always be made with the assistant of the visiting chief working in the out-patient department, the admission to the hospital thus representing only a physical transfer from one branch of the same service to another.

#### *Location of Department Important*

There is no general agreement as to whether the out-patient department of the hospital should be housed in a separate building in a detached or semidetached type of institutional architecture. Sometimes each special building contains an out-patient department appropriate to the type of in-patient treated there. Some of the newer constructions have a many floored out-patient department with efficient vertical transportation, each division being on the same level with the corresponding in-patient service. Much may be said in favor of the effectiveness of this plan. Perhaps in an equal number of cases in hospitals of scientific and economic preeminence, there is observed a distinct out-patient building under a centralized administration with a working co-ordination with the utilities and specialty departments of the hospital proper.

The wisdom of the adoption of either of these plans depends not a little upon the type of hospital and upon the nature of its architecture. In certain instances, such as in the maternity department for example, it is claimed for the former plan when the supervising nurse of the building is also in charge of the out-patient department that patients welcome the presence of one whom they have learned to know and trust during prenatal visits to the institution. It is also suggested that in this way a closer cooperative understanding can be brought about than when out-patient visits are made to a building somewhat distant from in-patient facilities.

Much is to be said in favor of unified out-patient control. Certainly better credit work can be done in this type of physical and administrative arrangement and there is but little question when a medical director or other supervisory officer is available for this department that routine procedures can be successfully originated and followed. Certainly the out-patient department should not be relegated to a basement as is too frequently the case. And access from the street should be simplified. Ample, well lighted and aerated space should be provided. One needs but to visit such splendid departments as that of the Massachusetts General Hospital, Boston, to appreciate the necessity for space and organization.

It has been intimated that unit direction is necessary. The medical director, nurse or social

service supervisor of the out-patient department usually answers to the superintendent of the hospital. In some instances, it is feared that the same attention to organization is not given in this work as is the case in the in-patient plan. It would seem that in an out-patient organization no lines of authority should proceed around the director of this department. To be sure, the superintendent of nurses selects and frequently directs the nursing work here and the social service director assigns workers to this department. Yet, the responsibility for the successful prosecution of this work and the supervision of all personnel should be centralized in the director of the out-patient department.

A problem that concerns the average superintendent is the difficulty of controlling the addition of new activities in this department. When a physician becomes particularly interested in some branch of his specialty, he often wishes to establish an out-patient department for the treatment of these patients. A special committee of the staff, cooperating with one of the board members, should consider such applications, and the presence of a community need should take precedence over individual scientific or personal aspirations. As an example of the multiplying activities of this work, there may be mentioned but a few of the more recent additions to modern out-patient services: hematology, desensitization, thyroid, immunology, industrial medicine, nutrition and psychiatry. Now there does not seem to be any question but that in many localities, such specialty divisions are necessary. But when a desensitization clinic has only a handful of weekly visitors, there is little question that the time and money spent should be wisely directed elsewhere.

#### *Time Arrangement Is Important*

A critical glance at the out-patient rosters in hospitals generally may reveal an extravagant use of possible out-patient hours. Frequently this is true because of an effort on the part of the hospital to adjust these services to the office hours or to some request of the physicians. Yet the difficulty in securing efficient and well trained staff service for out-patient departments generally cannot be minimized. Nevertheless this matter can be carried to an absurdity. Graph A illustrates the time arrangement of an out-patient department in a Western hospital.

It will be observed at once that but a portion of three days is utilized in this activity and that a large percentage of available hours is unoccupied. As a result of this faulty arrangement, the clinic hours are crowded to the utmost and a great many patients are but superficially exam-

ined and treated. In such instances, the board of trustees and the superintendent, in cooperation with the staff, are in duty bound to bring about a radical readjustment of this service. If physicians cannot be in attendance at any other hours, then an effort should be made to replace those now on service or to attract younger men.

#### *Peak of Service Is in May*

As a matter of practical interest, the seasonal use of out-patient departments is worthy of some thought. It would seem perfectly understandable that the heated months should not provide as many out-patient visits as those of Spring, Winter and Fall. This perhaps is due to the fact that catarrhal conditions are less frequent in the latter group of months and also possibly to the existence of the summer vacation period affecting both the staff and its clientele. It is a common finding for the month of May to provide the peak of out-patient visits. There is no agreement as to the exact reason for this observation. As will be noted in Graph B, which sets forth the experience of three Eastern hospitals, the peak of service requirement is reached in May or June and the low level is reached in July, August and December.

A new development in some out-patient departments is the establishment of diagnostic clinics. Several hospitals have endeavored to apply this principle to in-patient service and to this end they have inaugurated a lump sum rate for the study and diagnosis of gastro-enterologic, cardiac, renal, endocrine and other disturbances. It is feared that many such institutions have overshot the mark by endeavoring to recompense a group of physicians for the part they are expected to play in this study, while providing at the same time for the payment of hospital board and room fees. In diagnostic out-patient clinics a charge for the individual studies is usually made. Although such an attempt is decidedly modern, care must be taken not to encourage the transference of loyalty from a faithful family physician to a hospital department. No patient should be admitted to the diagnostic clinic without a letter from his family physician. A report should not be given to the patient but to the doctor.

The compensation "clinic" is also a development that has come into existence because of the enactment of certain laws covering this group of patients. In this instance, the physician is often paid a salary approximating \$100 a month and the hospital is at the same time able to realize from 10 to 25 per cent on its investment.

This discussion will be continued in the next issue of THE MODERN HOSPITAL.

# Editorials

## The Old World Beckons

WHEN early in September, 1928, there gathered about a table in the Red Cross headquarters in Paris a group of men interested in the formation of an international hospital congress, few realized that this movement would develop as rapidly as it has. Although the movement was considered by all to be a definite step forward, there appeared to be difficulties involving distance and language which in all probability would hamper the practical elaboration of the idea. But the call of the sick, coming as it did on this occasion from the very four corners of Europe and the Americas, was too pressing to be disregarded. A subsequent meeting of delegates in Paris was necessary only to consummate the details of the plan.

The first international hospital congress held last year in Atlantic City is now but a pleasant memory. With the preliminary announcement of precongress and postcongress European tours, there comes in the minds of hospital people everywhere an aroused interest in the second international convocation to be held in Vienna in June one year hence. Not only must there eventuate from this meeting a splendid stimulus to more effectual hospital conduct everywhere, but the pleasure and profit that travel and the mingling of hospital workers from all countries and climes will bring must surely represent by-products of no little value to those in attendance. Perhaps the greatest of all migrations of hospital executives towards the European continent will begin when the *President Harding* leaves her dock in New York on May 14, 1931.

The American hospital field may well feel proud of the part that it has played in crystallizing the belief that a distinct obligation rests upon national hospital organizations to extend, if possible, their usefulness and influence beyond their normal geographical confines, for the alleviation of suffering and the prevention of disease know no limitations of language or latitude.

Boards of trustees everywhere should assume a generous attitude in aiding their representatives to finance this proposed tour to Vienna. Such a pilgrimage must elevate the dignity of hospital administration as a profession and, of even greater importance, should tend to bring within the reach of the masses here in America, a more efficient service to the sick. The broaden-

ing of individual viewpoints and the ripening of international relationships are both ends that warrant the adoption of any reasonable means by which the greatest possible number of hospital executives can be in attendance at this international congress.

THE MODERN HOSPITAL commends the international committee on the work thus far accomplished and predicts a useful and interesting conference in Vienna in 1931.

## A Step Toward Uniform Accounting Methods

ANNOUNCEMENT that the United Hospital Fund of New York has created a conference on hospital accounting to promote a uniform accounting system in the hospitals of New York City is interesting and important in view of the pressing need for comparable cost statistics of hospitals throughout the country.

One of the reasons that hospitals are often criticized for lax methods of administration is that there has not been general recognition of the methods necessary for intensive study of procedures, and the mechanism for providing daily and monthly financial records of performance has not been set up.

Any system of accounting has a dual purpose to serve, first, that of a permanent record of professional, vital and financial performance and, second, that of a vehicle for studying these performances in an analytical way. Statistics if they are to be analyzed and compared must be kept in a uniform manner, otherwise their potentiality is lost.

The United Hospital Fund has undertaken this new project at the suggestion of a number of the hospitals and with the cooperation of the state department of social welfare, the municipal department of hospitals, the New York Federation for the Support of Jewish Philanthropic Societies, the Brooklyn Hospital Council, the Brooklyn Federation of Jewish Charities and the associated out-patient clinics committee of the New York Tuberculosis and Health Association.

The conference has been established to meet four main needs: uniformity of accounting for all hospitals so that comparisons of cost between institutions may be made accurately; uniformity in record keeping so that statistics may be comparable; the development for the United Hospital Fund, if possible, of a better basis of distribution to its members of the funds which it collects annually; the development of a university training course for hospital accountants.

Many institutions do not conduct their business

administration and accounting so that they can tell what it really costs them to render a given service. Charges are sometimes established in an arbitrary fashion that has little relation to costs. Yet it is essential to the intelligent operation of a hospital that the executive be able to detect leaks and extravagance before serious damage has been done to the institutional finances.

To-day hospital executives are more and more coming to realize that the financial operations of any enterprise should be accurately mirrored in clear financial statements, prepared on a scientific cost basis and giving a picture of the continuous performance of the institution. That such statements will be of infinitely more value if they are kept in a uniform manner by hospitals all over the country is apparent, and if such a standardization of financial procedures could be established its results might be reflected in lower costs to patients.

### The Saunders Award

**A**FORTNIGHT ago in Milwaukee, a vast audience expectantly awaited an announcement of the award of a medal to the nurse who, during the year just past, had rendered the greatest service to her profession and to the sick of this country.

A committee of leaders in the nursing profession had been endeavoring for months to decide wisely as to the most deserving recipient of this honor. Nor was the attention of this group focused entirely on those who labored in great urban institutions of healing, for as fine a brand of heroism is frequently found amongst nurses who work in isolated communities where equipment is meager and justifiable discouragement is constantly to be combated. Difficult indeed must have been the task of the committee of award. And yet, there was one name which seemed to stand apart from all others. She it was who for several decades had placed the claims of the patient above any others. She had certainly subordinated self and elevated service. She had literally given her life in the cause of improving the care of the patients in a great city hospital.

In awarding this medal posthumously to S. Lilian Clayton of Philadelphia, the donor and the committee of this award acted as would have the whole nursing field had its members been given the opportunity of voting as to its recipient. Miss Clayton exemplified the finest traditions of nursing and this recognition of her service cannot but spur young nurses everywhere to emulate her example.

### Comparative Hospital Costs

**A**RECENT article in the *Journal of the American Medical Association* by Dr. Willard C. Rappleye of the Commission on Medical Education calls attention to some interesting comparisons of the estimated cost of medical care in this country.

The cost of nongovernmental hospitals is estimated at about \$15 per family per year. The expenditures for passenger automobiles last year was about ten times that amount per family. Four times as much is spent for tobacco and the expenditures for ice cream, soft drinks and chewing gum total twice as much. The nonmedical expenditures cited are twenty-nine times the cost of nongovernmental hospitals and five and a half times the estimated total cost of all forms of non-governmental medical care. The cost of maintaining the nongovernmental hospitals is about one-half of 1 per cent of our national income, not a large proportion to pay for the inestimable service which those institutions provide for the community.

Totals and averages do not present the picture accurately owing to the fact that the need of hospital care at any one time is confined to a small proportion of the population (the daily census in nongovernmental hospitals is 0.2 per cent of the population) and the few people requiring that care must meet most of the cost, often unexpectedly at a time when other expenses are likely to be increased and the income of the family is frequently diminished. But they do suggest the basis for distributing the cost of hospital care over a large group of the population and over a period of time. Those familiar with the facts know that the costs of hospital care are reasonable and that we have sufficient money in this country to provide satisfactory support for the hospital program, particularly when we take into consideration the amounts spent for nonessentials and the ratio of hospital and medical expenditures to the national income.

Propaganda regarding the cost of medical care has not presented that problem in its relationship to other economic questions and has not emphasized sufficiently to the public that the financial aspects, while formidable, should not be difficult to solve and that they are not the most important. Our efforts should be concentrated upon improving the quality of hospital, medical, nursing and dental services. Improvement of that essential element in the diagnosis, the treatment of sickness, the prevention of disease and the conservation of health, mental as well as physical, will in the long run pay handsome dividends in terms of public welfare.

## The Aphorisms of Colby Rucker

**H**OW many of these kindly thoughts and Oslerlike bits of wisdom from the pen of Doctor Rucker do our readers recall? Colby Rucker's stimulating personality and tolerant viewpoint are here reflected in some of his pithy sentences which state general doctrines and truths in a fashion that sends them home to the reader and often brings cheer, encouragement or well merited reproof. In the following paragraphs let us "talk it over" once again with our friend, whose loss is felt not only in hospital circles but in medical circles as well.

**O**UR efforts in the domain of curative medicine have brought rich blessings to suffering humanity but we have not realized even dimly the almost limitless horizons of hygiene's field.

**M**ENTALLY most of us lead a hand-to-mouth existence. We are so busy spending the gold of our minds that we do not take time to put anything back, and by and by we arrive at the point where the balance sheet of our brains shows an O. D. opposite the terminal figures. In other words, we have drawn on our reserves until there is an overdraft and we are working on a negative balance.

**Y**ESTERDAY is dead.  
To-morrow is unborn.  
Only to-day lives.  
Yesterday's mistakes are buried.  
Yesterday's good deeds are immortal.  
What we do to-day may die or live forever.

**F**EAR is the archenemy of man, destroying initiative, evading responsibility, shirking difficulty, throttling self-expression, cloying happiness and defeating success. If we will trust ourselves and be true to that trust, nothing can harm us. Fear, on the contrary, is an invitation to disaster; it invites defeat and is a burden to the mind poised for flight into the regions of accomplishment. Thus bound in the shackles of fear, progress is impossible. Its antidote and cure is faith. Self-faith and job-

faith, coupled with industry and intelligence, are bound to lead to the Pisgah heights of success. How foolish is fear.

**T**HERE are some people in whose brains an idea would die of lonesomeness. These people are as superficial as the dogs that ran as they drank from the Nile for fear that the crocodiles would catch them.

**A**LMOST any moron can make a living by working eight hours a day but in the catalogue of success it is the ninth and subsequent hours that count.

**S**OMETIMES the man who doesn't know when he is licked is just a plain, garden variety fool. He may have fortitude; his tenacity may be 100 per cent but his judgment is a minus zero. Continuing in the face of adversity is one thing but when that adversity is adamantine, it is simply a case of stubbornness. The time to quit is when you're beaten.

**A**GOOD journal, an inspiring book or a quiet talk with someone who has something to impart will do much to make up the losses that we constantly undergo through our contacts with the sick and those who labor for their relief.

**S**TEADFASTNESS is a splendid quality but there are times when, at base, it is sheer obstinacy. An enormous number of the things on which we focus our attention are really unimportant, yet we are apt to harry our souls over them and indulge in self-approbation because we are unyielding to them. A sense of proportion, a realization of relative values, would prevent this, but we are all prone to mistake the shadow for the substance and to regard with suspicion anything that deviates from our crystallized standards. There is a mean course between this and happy-go-luckiness that keeps the ship of character headed in the right general direction and is far more comfortable to follow.

**S**AVE your pity for other people, be less charitable with yourself and more kindly to those with whom you come in contact and you will be happy.

**A**RE you sitting with your back to the window of life? If so, you are missing a lot; your vision is shortened and your mind stunted. Many people fail to get much out of life because they never take a real good look at it. They fail to appreciate its beauties because their backs are always turned toward it; they look away from, instead of at it, seeing only the drab, the dreary, the bore-some in existence. Look out of the window and you will see how good life really is!

YOU can't expect to sit in the orchard of life and have the apples drop in your lap. Even if they would, windfalls are usually pretty poor fruit. The least that you can do is to get up and shake the tree, better still, to climb it and pluck the apples which grow nearest to the heavens where they have ripened under the benign influence of God's sun and rain and air.

IF YOU want to commit mental suicide, pity yourself. There is nothing which is more destructive to efficiency excepting booze or drugs.

SOME people waste a lot of time telling how busy they are. By this constant repetition they impress themselves with the importance of what they are doing; they deceive themselves into believing that they are tremendous workers and they acquire a sort of an impotent busy delirium. They are like an automobile driven in low gear. They make a lot of noise but their mileage performance rate is low.

THERE are a lot of people who seem to think that the universe owes them a living but they have not the energy to get out and collect it. If people try to make the world carry them they are apt to get dropped with a terrific jolt.

THE man who was never criticized, said, did and was nothing, and he was criticized for that. He went through life fearing what people would say; he imagined that he could slip through his day's work successfully because he avoided adverse at-

tention; he was a human rabbit who cowered in the bushes or ran away rather than to face danger with uncovered fangs and bristling back. Such rimless zeroes never get anywhere, never do anything, never change the world for better or for worse. Their puny souls never climb the rugged heights to victory, there to breathe deep the satisfying atmosphere of accomplishment. The man who said, "The public be damned" was a better citizen and did more for that same public than he whose fearful soul trembled at the slightest breath of disapproval.

ISN'T it a fact that 90 per cent of the things that worry us never eventuate and the other 10 per cent are not worth while anyway? Then why worry?

THERE is one commodity that should never be kept on the shelves of the physician's drug room. It should be continually carried in his heart and dispensed freely. The name of the substance is "Sympathy."

SOMETIMES even old Mother Earth gets tired and needs a rest. The wise agriculturist then plows the field and lets it lie fallow for a season, soaking up the rain and sunshine. It is even so with human minds and souls. About every so often it is a good thing to cease cerebration and soul searching and let in the rain and sunshine of sheer animalism.

A "SEVENTEEN HOLER" is a person who never finishes. Usually he is a grand starter; his first shot leaves the tee majestically and he makes his first hole in par; the second is not quite so good; the third shows a let down in performance; the slump is progressive and by the seventeenth hole he has petered out and quit. Every walk of life has its seventeen holers, its unfortunates who never reach their destination, its short lived ineffectives.

"NO MAN by taking thought can add a cubit to his stature," but he can add to his mental breadth and to the welfare of his neighbor. To him who thinks, all things are possible and to him who thinks and works,

nothing shall be denied. How wonderful is this gift of thought. It enables man to cast his voice across the realm of space and there indelibly to record it, to transport his body to the uttermost corners of the earth, to the depths of the sea and the heights of the air. It is the conqueror of disease, the alleviator of pain and the sure weapon of the weak. It is the divinest gift to man.

DOES there ever come a time when your work palls on you, when the parturition of new thoughts is beset by dystocia and the world is viewed with lackluster, amarillic eyes? You are not melancholy, the oppressive devil of biliousness is not perching on your shoulder, yet the savor of life has gone and you would welcome as a blessed relief, fire, pestilence or famine. When your symptoms parallel these, there is only one diagnosis—indigestion of the job, and only one treatment—a vacation.

WHAT is a thought—a chemical reaction, an electric spark, a divine spirit? Since the dawn of his existence, man has asked this question and to-day it is still unanswered. Yet, it is the ability to take thought that distinguishes him "from the beast that perisheth," which has empowered him to harness earth and fire and water, and to impose his will upon the wind, the tides and the stubborn forces of Nature. One thinking man or woman may set loose a thought that shall be immortal and hence for all time shall influence all who encounter it.

*Colby Rucker*  
(1875-1930)

# Abstracts of Hospital Literature From Foreign Countries

A Department Conducted by E. M. BLUESTONE, M.D.  
Director, Montefiore Hospital, New York City

**IS IT DESIRABLE FOR MEDICAL MEN  
WORKING IN HOSPITALS TO SERVE  
ON A FULL-TIME BASIS?**

By H. J. Ph. Fesevur, Director, Deventer

THE author discusses the tendency to socialize the organization of municipal hospitals in the matter of the appointment of a full-time medical staff with a view toward giving patients all of the care they need and safeguarding them against ruinous bills of doctors. It is pointed out that a patient under such a system loses the right to select his own doctor, and a break in the ties between the patient and his doctor is inevitable. The author questions whether the physician under such a system, maintains his energetic efforts to the same extent as does the volunteer doctor.

This article is based on discussions of the subject at one of the recent meetings of the Association of Hospital Superintendents. In further support of his thesis the author quotes the results of inquiries made abroad, particularly in America. There is nothing new in the statements made, and the problem is discussed from angles that are familiar to the American reader.

**THE JULIANA CHILDREN'S HOSPITAL,  
THE HAGUE**

By Dr. H. A. Stheeman, Director

The Children's Hospital, which was opened in The Hague, Holland, during the year 1929, is described in detail by its medical director in *Het Ziekenhuiswezen*. The financial support for the construction of this building was provided in large part by the municipality in return for which accommodation was provided for a certain number of indigent patients at a fixed daily cost to the municipality.

The hospital consists of a main building (the so-called "nursing" building), a pavilion for infectious diseases, a polyclinic (out-patient department), a kitchen, a laundry and a power building, all grouped on a large plot in the dunes near the beach of the North Sea.

The unusually beautiful site on which the hospital has been built, the spacious loggias, the

unusual space allowed per bed in the wards, which are exceptionally well aired and lighted, together with a thoroughly modern equipment, make this one of the outstanding institutions in the country. Floor plans and a number of interior and exterior photographs give to the foreign reader, who is unable to understand the Dutch language, a fine picture of this hospital.

**THE DIET KITCHEN**

By Catherine P. Daniels, Instructress, Groningen

Thus far the special diet kitchen has scarcely made its entrance in the Dutch hospitals. In this important branch of hospital work, the writer says that America has led the way followed by England, Germany, Austria, Hungary and Switzerland. The Dutch central kitchen is managed by an expert who has a knowledge of cooking and commodities. Recently interest has begun to develop in the value of special diets administered by a scientific dietitian. The editor of the *Dutch Hospital Review* (*Het Ziekenhuiswezen*), who abstracts these articles, says that although explanations of this service are superfluous to the American reader, it will interest him to know that in Europe opinion about the organization of a special diet department differs. In general there are three types: the system of one central kitchen for all the food service in the hospital; the system in vogue at Buda Pest (to be described); the system of separate kitchens for routine and special diets.

The first of these, the central kitchen, which combines all of the food functions, is the rule of the smaller hospitals. The second is a variation of the central kitchen applied in the hospitals of Buda Pest and described by Dr. A. von Soos, the Hungarian delegate to the first International Hospital Congress in Atlantic City. In the main kitchen a number of menus are prepared composed of different soups, meats, vegetables and desserts. Each pavilion has a "distributing" kitchen managed by a dietitian who comes to an understanding with the doctor and the patient about an *à-la-carte* menu. In the third system, the routine and

special kitchens are separated from each other.

These three methods of handling the food problem are of course familiar to hospital superintendents in America and the Dutch reviewer is apparently unaware that dietotherapy in this country has not yet been given the encouragement it deserves as an important department of hospital service.

**DEPARTMENTS WITHOUT NURSING PERSONNEL IN THE PROVINCIAL ASYLUM AT SANTPOORT, NORTH HOLLAND**

*By R. Verbeek, Administrator*

These departments were created by the administration of both provincial asylums of North Holland in imitation of the "Pflegelose-Abteilungen" established by Doctor Mönkemöller in the provincial Heil-und-Pflege Anstalt in Hildesheim, Germany.

The author describes the system established at the asylum in Santpoort, the largest mental institution of the Netherlands. One of the older buildings was remodeled to accommodate nineteen male patients, providing for these patients a maximum of freedom. The kitchen, the common dining room which is handsomely furnished and the library are arranged together with workshops, a garage and storerooms on the ground floor. The first floor was reserved for single bedrooms. The management of this house was entrusted to one of the resident patients assisted by a second patient. They are both responsible for the maintenance and control of the household business. The patients keep house and are all engaged in plain household occupations. The general supervision is provided by a male head nurse.

This department for self-supporting patients has been in use since February and has thus far justified the expectations of the governors. It is hoped that further details will be available because the experiment has in its general plan certain elements that may lead to disaster in the absence of perfect control.

**IN AND AROUND THE HOSPITAL KITCHEN**  
*By Miss Koekman, Director, Municipal Hospital, Alkmaar*

The author reveals interestingly the secrets of the economic problems of the hospital kitchen garnered during many years of experience. It seems that Miss Koekman, over a period of many years, succeeded in reducing the per capita cost of food by several pennies daily and that this was a financial factor that won over the municipal authorities to the construction of a new hospital.

She insists that, in spite of the low cost, the quality of the food and its preparation left nothing to be desired and she publishes a number of menus to prove her point. The elimination of the middleman and the system of direct purchasing from wholesale sources was a large factor in the economy, besides the system of preparing various fruits on the spot instead of buying them bottled or canned. She also has an interesting description of a method of dealing with the large amount of food waste, which is the bane of every hospital dietitian. She seems to have an ingenious way of using food which remains in the kitchen after the needs of the patients have been satisfied.

The editor of *Het Ziekenhuiswezen* wisely adds that the economies practiced by Miss Koekman are praiseworthy, but that one must not lose sight of the fact that in Alkmaar, which is in a district devoted to agriculture and cattle raising, cheese, butter, cream and eggs may be purchased at the lowest conceivable prices.

**THE EDUCATION OF NURSES IN AMERICA**

*By Heleen A. Melk, Instructor of Nurses, The Hague*

This is a continuation of previous articles by Miss Melk in which she describes the teaching and educational methods in vogue in the United States. In this article she stresses the education of the instructor of nurses. She describes with great accuracy some of the systems in the preparation of teaching nurses for the benefit of the various nursing schools located throughout Holland.

**MEDICAL RESEARCH AND THE HOSPITAL EXECUTIVE**

Sir Thomas Lewis, in an article of unusual interest entitled "Research in Medicine: Its Position and Its Needs" which was published in the *British Medical Journal* of March 15, 1930, has the following to say about present day medical literature among other things:

"The serious aspect of the widespread encouragement of transient research is that, while such work rarely possesses scientific value, yet the reporting of it has acquired a recognized commercial value, and its realization in the latter way becomes much more often than not the real goal in view. The goal referred to is in certain circumstances a perfectly legitimate one. It is a most desirable and healthy thing that good teachers should use the medical press to inform; it is right that contacts between consultants and general

practitioners should become established by this means, and that through periodicals new work that is of established value should be brought to the knowledge of the medical profession as a whole.

"But the present system is obviously capable of, and is actually subject to, grave and frequent abuse. The abuse consists in the redundant publication of articles intended to pass muster as records of serious original research. Now the editors of the journals concerned are for the most part either whole-time editors or are actually engaged in practice. In neither case are they trained by long practical experience of research to deal with such articles critically or to judge them well; their daily contacts are with curative rather than with scientific medicine. Thus it comes about that there is little or no attempt on the part of editors collectively to stem the tide of pseudo-scientific publication; its amount is controlled almost exclusively by the desires of writers, and the tables of our libraries groan under an ever-increasing weight of periodicals. Research is widely exploited for professional ends; records of imperfect and actually unsound work find an almost open path to the printing press; reports of purely repetitive work have reached an extraordinary and most undesirable magnitude; many papers are published almost in duplicate. The effect of such publication has passed beyond the bounds of menace; it has grown to form a distinct barrier to progress, with which more serious workers recognize they have to contend.

#### *Hospital's Good Name Often Involved*

"The baneful effects are twofold. By its mass it conceals work that has value; by its quality it undermines the general standard of accuracy in observation and thought. Current teaching in the wards and textbooks, current methods of thought in practical daily work, are built in large part upon the basis of published articles, past and present. The quality of such articles is a matter of vital concern to professional work, both directly and also indirectly, through its influence on progress."

It might be advisable for executives to consult with the medical board of their hospitals in an effort to determine the quality of the scientific contributions that emanate from the hospitals under their charge. This is a matter of deep concern to the administrator because the good name of his hospital is involved. The warning of Sir Thomas Lewis should be given serious attention by hospital administrators as well as physicians.

#### Icelandic Nurses to Open New State Hospital This Fall

Fifteen years ago, equal suffrage was granted to the women of Iceland. In honor of this event, the Icelandic women established a fund to build a state hospital that would provide a complete education for the medical profession as well as for nurses and midwives. This year, the thousandth anniversary of the founding of the Parliament of Iceland, will see the hospital completed and ready for use. It stands in the city of Reykjavik. The announcement of the opening of the new hospital is made by the secretary of the International Council of Nurses.

Hitherto the nurses of Iceland have taken part of their training in the various hospitals of that country and the rest in Denmark and Norway, since Icelandic hospitals have not offered sufficient practical experience in nurse training.

The Icelandic Nurses Association has been advising on all the arrangements with regard to the new hospital and has had some difficulty in getting a three years' course accepted. Some of the more prominent citizens felt that Iceland could not afford more than two years' training for its nurses.

Icelandic nurses in foreign countries who wish positions in the new state hospital to be opened this Fall should address all inquiries to Mrs. Sigríður Thorvaldsson, president, Icelandic Nurses Association, 14 Tjarnargata, Reykjavik, Iceland.

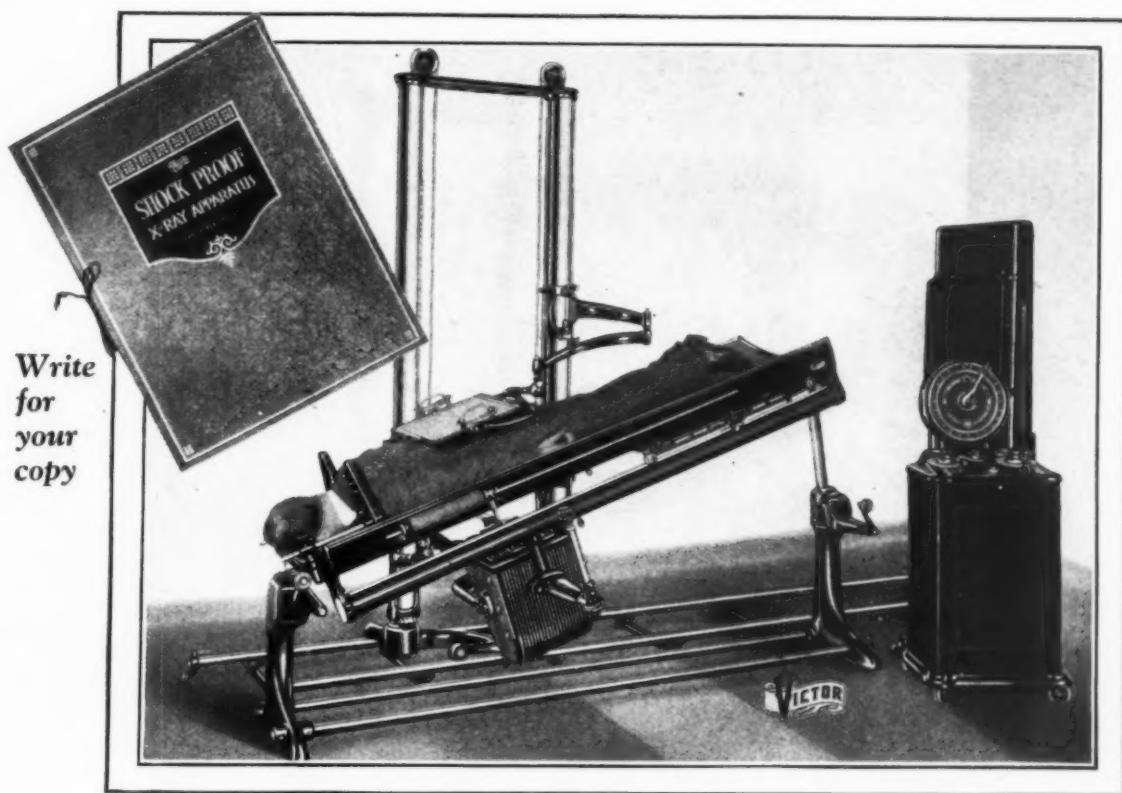
#### A Hospital That Treats Tropical Diseases Exclusively

Since two-thirds of the British Empire lies in the tropics, it is fitting that there should be in London, the commercial center of the empire, a hospital for the treatment of tropical diseases, says *The Hospital*. The hospital, founded thirty-years ago by Sir Patrick Manson, provides specialized treatment for those who have been attacked by diseases peculiar to the tropics. Persons who seek advice or treatment in the hospital include government administrators, engineers, planters, missionaries, journalists and officers and men of the mercantile marine. Not only do British subjects receive its services, but patients from every region between the tropics of Cancer and Capricorn.

At the present time many extensions and improvements are being made in the Hospital for Tropical Diseases and it is expected they will be completed before the opening of the leave season, or early in April. Beds are being added to bring the number to seventy-five. Ward kitchens, bathrooms and lift service are in the process of being remodeled, as is also the operating theater. A sun parlor will be provided for patients who are accustomed to an abundance of sunshine. There will also be a patients' day room or lounge for those who are convalescing.

One of the most notable features of the reorganized tropical hospital will be the Manson Clinical Theater where clinical lectures will be given to the students of the London School of Hygiene and Tropical Medicine and other postgraduate groups. The new pathological laboratory will be a center in London to which any member of the medical profession will be free to send material for specialized diagnosis or advice.

The cost of the alterations will amount to about £20,000.



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## NEWS OF THE MONTH

# Miss Clayton's Program Is Carried Through Happily at Milwaukee

THE national biennial nursing convention, held in Milwaukee, June 9 to 14, with the joint program of the American Nurses' Association, the National League of Nursing Education and the National Organization for Public Health Nursing, was an unquestionable success from the moment that members of the joint board of directors arrived on the Saturday before, until the last committee finished its work and left for home and everyday life.

On Monday, when thousands of visiting nurses were registering, the blue sky smiled on all, while glimpses of an equally blue lake offset by the green of trees and of grass, joined the Wisconsin nurses in their welcome. The hospitality of the sky wavered occasionally but that of the hostesses never once failed, and all left Milwaukee feeling that the convention had been among those best managed and most successful.

An introduction into the program, the necessity for which was regrettable, was the memorial service for S. Lillian Clayton, held in St. Paul's Church, Sunday, June 8, and while many nurses were unable to reach Milwaukee for that occasion, the church was filled to capacity by those who wished to pay their last respects to the president of the American Nurses' Association.

That the death of Miss Clayton and her absence saddened the thought of many was evident, but, emulating the presiding officer, Elnora Thomson, all seemed resolved to carry through happily the program plans sponsored by Miss Clayton.

Much satisfaction was realized when on June 12 at a joint meeting of the three organizations, the first Walter Burns Saunders medal for distinguished service was awarded posthumously to Miss Clayton. Impressive was the ceremony of presentation by Dr. Joseph C. Doane, director Jewish Hospital, Philadelphia, and the acceptance, in behalf of Miss Clayton's school, by Constance White, president of the student council of the school of nursing, Philadelphia General Hospital. It was particularly appropriate for Doctor Doane to make the presentation of the award in that Miss Clayton was for years associated with him during his service as superintendent of the Philadelphia General Hospital.

### *Discussions Cover All Branches of Nursing*

The usual custom of holding joint sessions where all could meet on common ground lent variety to the specialized sectional meetings, conferences and round tables, where each nursing activity was presented and discussed. The care of the child, of the obstetrical and mental patient, of those with communicable diseases, each held its place, while the problems of the private duty nurse, of the public health nurse and of the institutional worker

had equal opportunity. Not one branch of the nursing field was slighted and those interested or seeking knowledge had merely to follow the program carefully.

The intricacies of legislative functioning of state boards of examiners and of inspection were discussed as were also professional magazines and publicity, registries, office nurses and nurse anesthetists. These discussions followed, preceded or accompanied reports from the grading committee which covered such subjects as requests from committees on the relief fund and on the grading of schools of nursing, conferences on rural and county nursing and better preparation of both graduate and undergraduate groups. Progress was everywhere in evidence whether the subject under discussion was the selection of students and their later adjustments, the technique of instruction in the sciences or how to minimize time spent in administrative details or to evaluate the work of the nurse.

### *Many Famous Laymen Appear on Program*

Provision was made for student group conferences. Representatives of senior class nurses met to receive stimulation and inspiration to carry back to their schools. Lay members, while mingling with the nurse groups both as hostesses and guests, had a complete program of their own that gave them full opportunity to meet informally and to discuss mutual problems, which kept board and committee members fully occupied.

From early breakfasts at 7:30 o'clock, all day long 4,000 nurses diligently worked and played in Milwaukee, visiting exhibits and hospitals, studying equipment and attending luncheons, conferences, dinners, formal meetings and again conferences.

The outstanding papers presented by members of the profession are too many to enumerate, but to those who heard them the thought that presents itself is that leadership in the nursing profession is the common rather than the unusual attribute. Of the nonnursing contributors there might be mentioned Glenn Frank, president, University of Wisconsin on "Durable Satisfactions of the Nurse's Career"; Clarence Stone Yoakum, Northwestern University, Evanston, Ill., on "Recent Conceptions in Education"; John Anderson, director, Institute of Child Welfare, University of Minnesota, on "The Nurses' Function in the Training and Guidance of Children"; Roy Bixler, examiner of students, University of Chicago, on "Selection of Freshmen Students"; Florence Rast, dean of women, College of Wooster, Wooster, Ohio, on "Student Adjustments"; and W. H. Burton, professor of education, University of Chicago, on "Principles of Supervision and Planning a Supervisory Program."

The business of each organization was not neglected and the boards of directors and their committees worked

## 'Ware Time . . . The Cheater!

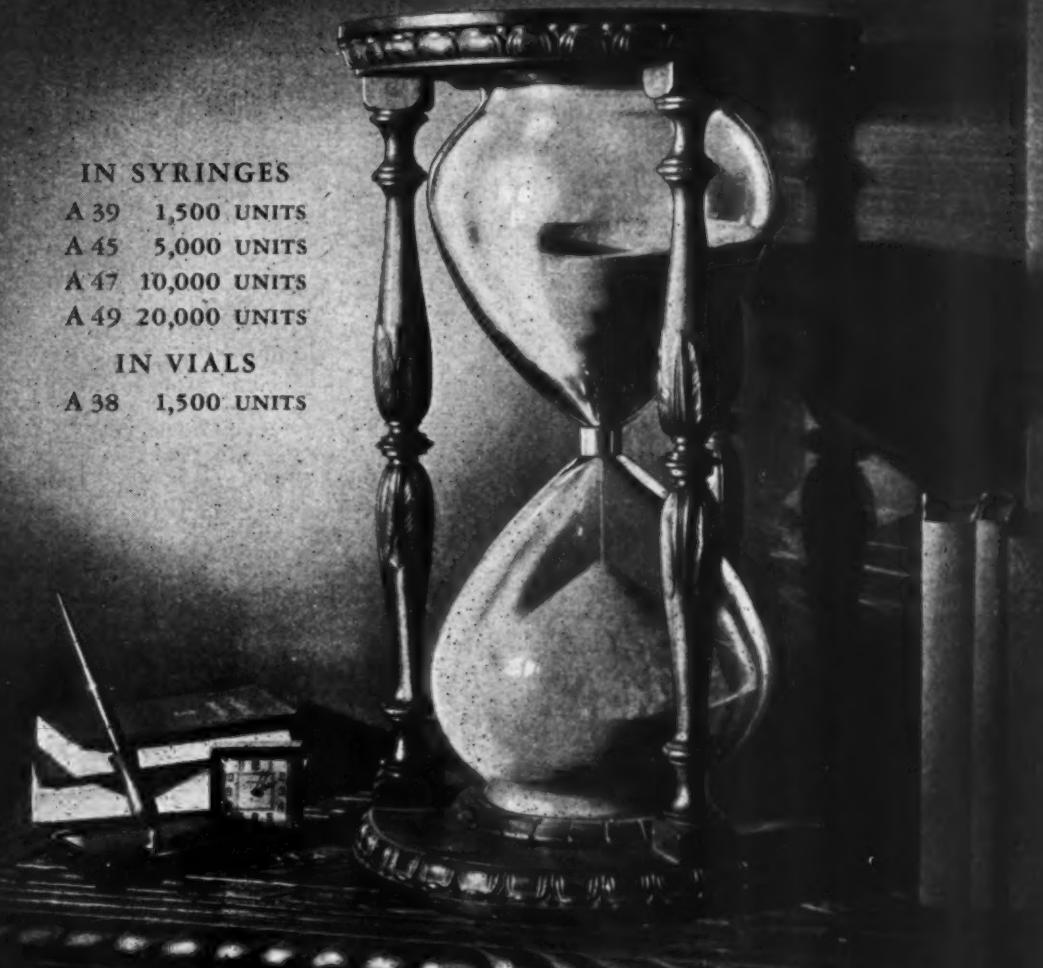
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- A 49 20,000 UNITS

### IN VIALS

- A 38 1,500 UNITS



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## News of the Month

overtime to prevent new officers from being hampered by uncompleted tasks.

Nurse representatives from San Antonio, Tex., from Memphis, Tenn., and from Washington, D. C., enthusiastically presented the conspicuous advantages of those cities for the 1932 convention. The delegates finally gave the winning vote to San Antonio, while the National League of Nursing Education will go to Atlanta, Ga., in 1931.

Officers elected for the American Nurses' Association were: president, Elnora E. Thomson, Oregon; secretary, Susan C. Frances, Pennsylvania; treasurer, Jessie E. Cattton, Massachusetts. For the National League of Nursing Education: president, Elizabeth C. Burgess, New York; secretary, Stella Goostray, Massachusetts; treasurer, Marian Rottman, New York. For the National Organization of Public Health Nursing: president, Sophie C. Nelson, Massachusetts; treasurer, Dr. Michael Davis, Chicago.

### Special Problems Are Discussed at Meeting of Catholic Nurses

Problems of special import to Catholic nurses were discussed at the sixth annual convention of the International Catholic Federation of Nurses, Milwaukee, June 6, 7, 8. Many who attended this meeting remained for the biennial convention of the American Nurses' Association, the National League of Nursing Education and the National Organization for Public Health Nursing.

Mae E. Coloton, president of the federation, presided at the various sessions. Subjects of interest to workers in every field of nursing were presented and discussed by the enthusiastic delegates. Addresses were made by the Rev. E. F. Garesché, S.J., and by the president at the opening meeting. The Rev. S. J. Mahan, S.J., regent of the school of medicine, Loyola University, Chicago, spoke on "The Rôle of the University in Nursing Education." Maj. Edward Fitzpatrick, dean, school of medicine, Marquette University, Milwaukee, spoke on "University Affiliations." Sister M. Ursula, St. Vincent's Hospital, New York City, discussed group nursing and the case method of assignment. Dr. Bert W. Caldwell, executive secretary, American Hospital Association, chose for his subject, "The Hospital Nurse."

The annual general business meeting occupied the afternoon of the first day, with a public meeting in the evening closing the first day's program. Mary G. Hawks, president, National Council of Catholic Women, gave an address at this meeting. Dr. Robert C. Buerki, superintendent, State of Wisconsin General Hospital, Madison, discussed that ever important subject, "Striking a Balance Between the Cost of Illness and the Average Purse." Other addresses were made by the Rev. Charles E. Coughlin, director, National League of the Little Flower, Detroit, and Dr. L. D. Moorhead, dean, school of medicine, Loyola University, Chicago.

At the morning session on the following day Anna E. Boller, president, American Dietetic Association, discussed the importance of dietetics in the preservation and rehabilitation of health. Margaret M. Butler, chief nurse,

department of health, Chicago, spoke on "Public Welfare," and Nan Ewing, superintendent of nurses, Ravenswood Hospital, Chicago, on "Clinical Charts." Sectional meetings were also held in the morning. Evelyn Wood, executive secretary, Council of Nursing Education, presided at the private duty section, and Mary E. Corcoran, St. Vincent's Retreat, Harrison, N. Y., at the schools of nursing section.

Outstanding among the speakers on the afternoon program were: Meta M. Pennock, editor, the *Trained Nurse and Hospital Review* whose subject was "The Development and Importance of Personality"; Daisy Dean Urch, director, school of nursing, Highland Hospital, Oakland, Calif., who spoke on "The Nurse With Higher Education—Her Contribution to Her Profession and to the Public"; the Rev. Raphael McCarthy, S.J., head of the department of psychology, St. Louis University, St. Louis, with the subject, "Psychology in Nursing"; Sister M. Elenore, dean, department of English, St. Mary's College, Notre Dame, Ind., who discussed "Therapeutic Qualities of Good Books."

The annual banquet was held in the evening, and the session closed on Sunday, June 8, with a program of addresses and music. At this meeting, the Rev. Alphonse Schwitalla, S.J., president, Catholic Hospital Association, and Dr. Anna Dengel, superior and founder, Society of Catholic Medical Missionaries, both gave interesting addresses.

The newly elected officers for the coming year are: president, Mary T. Walsh, director of nursing education, Mercy Hospital, Gary, Ind., and secretary of the State Board of Nurse Examiners for Indiana; treasurer, M. Evelyn Donnelly, Brooklyn Visiting Nurse Association, Brooklyn, N. Y.; corresponding secretary, Mary Dowling, industrial nurse, the *World*, New York City; recording secretary, Emma Dissette, Charity Hospital, Cleveland, Ohio.

### New Yorkers Build Modern Hospital in the Valley of Galilee

The valley of Galilee in Palestine now has a modern hospital, as the result of the benevolence of Mr. and Mrs. Peter J. Schweitzer, New York City. The hospital, the fifth modern one in Palestine, was opened May 1. It will be conducted by Hadassah, the women's Zionist organization of America.

Mr. Schweitzer gave \$25,000 for the building, and Mrs. Schweitzer gave an additional \$8,000.

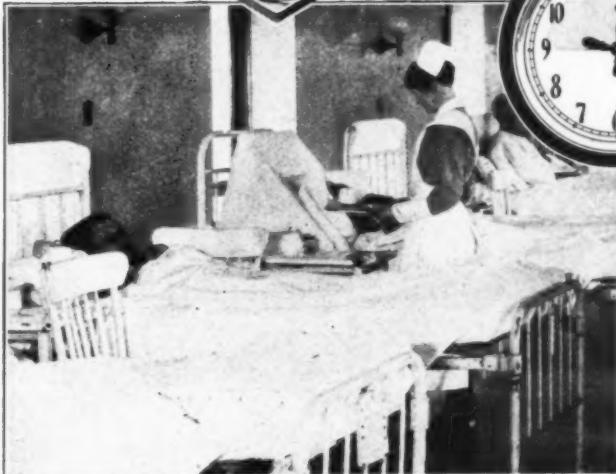
### Formal Reception Marks Opening of Nurses' Home

A formal reception marked the opening of Patten Memorial Home for Nurses, Evanston Hospital, Evanston, Ill., on May 27. The home was occupied on June 2.

The home, a four-story colonial structure costing \$700,000, was erected to the memory of James A. Patten, grain operator, who died several months ago. Mr. Patten had long been a benefactor of Evanston Hospital.



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## News of the Month

# Sidney Davidson Elected President of Michigan Association

THE fifteenth meeting of the Michigan Association was held at Grand Rapids, May 28 and 29. In conjunction with the meeting, the Michigan Dietetic Association and the Michigan chapter of the Association of Record Librarians of North America assembled, the joint assembly bringing together about 150 persons.

New officers for the hospital association were elected as follows: president, Sidney G. Davidson, superintendent, Butterworth Hospital, Grand Rapids; first vice-president, Louis J. McKenny, Highland Park General Hospital, Highland Park, Detroit; second vice-president, Rev. C. C. Haag, Evangelical Deaconess Hospital, Detroit; third vice-president, Margaret E. McLaren, R.N., superintendent, Women's Surgical and Maternity Hospital, Flint; secretary, Robert G. Greve, University Hospital, Ann Arbor (reelected); treasurer, Amy Beers, Hackley Hospital, Muskegon (reelected); trustees, Dr. D. M. Morrill, Blodgett Memorial Hospital, Grand Rapids, and Mrs. Kate Jackson Hard, Saginaw General Hospital, Saginaw.

Dr. Donald M. Morrill, superintendent, Blodgett Memorial Hospital, Grand Rapids, president of the association, made an excellent presiding officer at all the sessions and did much to promote the pleasure and entertainment of those present. The opening session on Wednesday morning was entirely occupied with a detailed consideration of a paper by Dr. Stewart Hamilton, director, Harper Hospital, Detroit, entitled "Coordination: The Secret of a Smoothly Run Hospital," published in the May issue of *THE MODERN HOSPITAL*. Dr. Hamilton dealt in turn with the many different departments of the hospital, each of which was then made the subject of comment from the floor.

### *Harper Hospital System Is Described*

The paper dealt with the Harper Hospital system and pointed out that the patient is the first consideration of each department. Coordination of departments should approximate the operation of a well oiled machine, it was stated, and the patient should be unaware of the running of the machinery.

Discussion of the different sections of the paper was led by Dr. Harley A. Haynes, director, University Hospital, Ann Arbor; Dr. Warren L. Babcock, director, Grace Hospital, Detroit; Esther Roehm, assistant superintendent of nurses, Blodgett Memorial Hospital, Grand Rapids; Robert G. Greve, assistant director, University Hospital, Ann Arbor; Dr. Alexander M. Campbell, obstetrical department, Blodgett Memorial Hospital; Sidney G. Davidson, superintendent, Butterworth Hospital, Grand Rapids.

At the afternoon session the subject of dietetics occupied the attention of the meeting. The first paper was given by Dr. Leo H. Bartemeier, Henry Ford Hospital, Detroit, and dealt with the application of mental hygienic principles to dietetics. This was followed by a discussion of dietetics from the aspect of the patient

by Dr. Daniel P. Foster, Henry Ford Hospital, Detroit.

A round table on the function of the hospital record department, conducted by Florence Babcock, University Hospital, Ann Arbor, was an interesting feature of this session as was also the discussion of nursing education contributed by Arthur Andrews, president, Grand Rapids Junior College.

A visit to the plant of a well known furniture manufacturer to inspect various types of hospital furniture brought the afternoon's program to a close.

The speaker at the annual banquet was the president of the American Hospital Association, Dr. Christopher G. Parnall, director, Rochester General Hospital, Rochester, N. Y. His subject was "The American Hospital Association and Hospital Standardization."

The association should seek to raise standards of hospital service, he said, but the policy should be one of mutual helpfulness rather than compulsion to meet set standards.

On Thursday morning a tour of inspection was made to three Grand Rapids hospitals—Blodgett Memorial, St. Mary's and Butterworth, and the afternoon session was given over to round table discussion of questions suggesting themselves to visitors during the morning inspection of these hospitals.

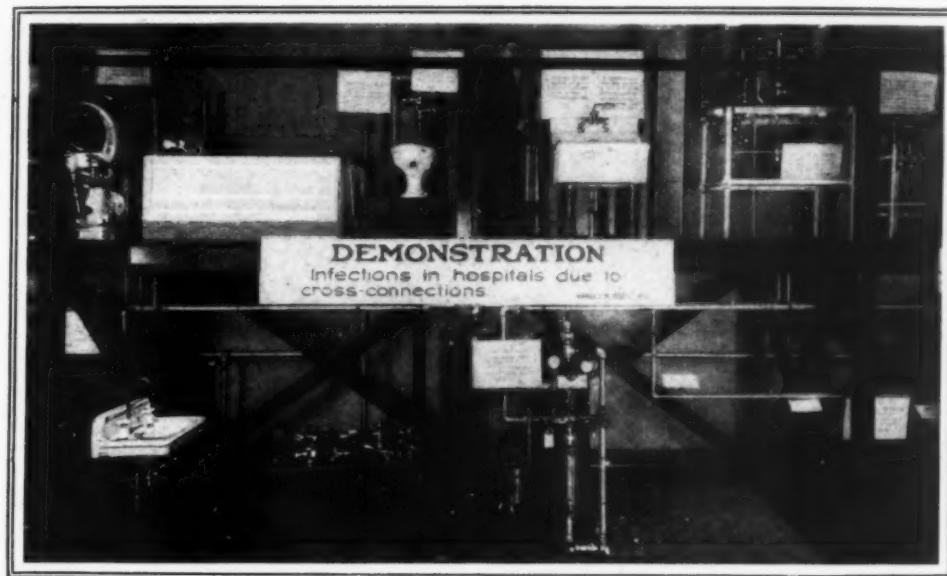
At the final business meeting a resolution was introduced by Dr. Warren L. Babcock, Grace Hospital, Detroit, inviting the American Hospital Association to hold its 1932 meeting in Detroit. This resolution was passed unanimously.

An interesting paper presented at the Wednesday morning session of the dietitians' association was that by Margaret McLaren, superintendent, Women's Surgical and Maternity Hospital, Flint. Preparation of food and serving it are an important part of the treatment of a patient, Miss McLaren said. She spoke of the value of a trained dietitian in the hospital in caring for the patients' food requirements and in seeing that diet regulations are carried out, and reviewed the duties of a dietitian in the smaller hospital where housekeeping and hostess duties are part of the job.

### New Officers of the Florida Hospital Association

New officers of the Florida Hospital Association who will serve for the fiscal year starting July 1 are: president, J. A. Bowman, Munroe Memorial Hospital, Ocala; president-elect, J. H. Holcombe, St. Luke's Hospital, Jacksonville; vice-president, H. Yates, Orange General Hospital, Orlando; treasurer, Dr. Walter A. Weed, Morell Memorial Hospital, Lakeland; executive secretary, Fred M. Walker, Duval County Hospital, Jacksonville.

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## News of the Month

# Hospital Social Workers Pleased With Success of Annual Meet

THE members of the American Association of Hospital Social Workers met in Boston for their annual meeting this year, June 8 to 14. Nearly 300 hospital social workers were in attendance and the program proved of interest and value to all.

At the business meeting the following officers were elected: president, Edith M. Baker, Washington University Dispensary and Allied Hospitals, St. Louis; first vice-president, Ruth Emerson, University of Chicago Clinics, Chicago; second vice-president, Ruth Wadman, American Red Cross, Washington, D. C.; third vice-president, E. Louise Adams, St. Luke's Hospital, New York City; secretary, Edith J. McComb, St. Christopher's Hospital, Philadelphia; treasurer, Marie Lurie, Jewish Tuberculosis Service, Chicago; executive committee, Mary Burke, Montreal General Hospital, Montreal, Canada, and Marguerite Spiers, Berkeley Health Center, Berkeley, Calif.

Unusual interest was taken this year in the revision of the by-laws which changed the requirements for professional membership in the organization. The changes adopted place emphasis on professional training and supervised practice.

The business meeting was followed by a series of program meetings. One meeting which stimulated a great deal of interest was the discussion of the cases submitted in the annual case competition. The committee announced that the first place was awarded to the Nessens Record, submitted by Evelyn Andleman, Beth Israel Hospital, Boston. Honorable mention was given to seven other cases submitted by members from the Mayo Clinic, Rochester, Minn., the Boston Dispensary, Boston, University Hospital, Ann Arbor, Mich., Letterman Hospital, San Francisco, and Johns Hopkins Hospital, Baltimore.

A series of round table discussions on certain techniques proved valuable and offered suggestions for continued study in the near future.

### Delegates Enjoy Interesting Social Program

Perhaps the outstanding gathering of the meeting was the dinner held in cooperation with the Massachusetts General Hospital in celebration of the twenty-fifth anniversary of the establishment of the social service department in that institution. Dr. Richard Cabot and Mrs. John Glenn were the speakers of the evening. A fund, in honor of Doctor Cabot and his interest in medical-social work, to be used for a library at the Massachusetts General Hospital, was presented by the American Association of Hospital Social Workers. The association feels that this year marks the first lap in the history of the development of social work in medical institutions.

The joint session with sections of the National Conference of Social Workers in the discussion of the health program, as well as the family program, proved of mutual benefit to social workers in medical institutions and

in the community social organizations. One particularly interesting luncheon meeting was held in conjunction with the Travelers' Aid Society discussing the sick transient.

Dorothy Ketcham, director of social work, University Hospital, Ann Arbor, Mich., presented an interesting paper and led the discussion on "Social Work in Tax Supported Hospitals." This meeting was exceptionally well attended, exceeding the expectations of the original committee. Since many problems are presented to the social worker in this particular type of institution, this meeting gave those present an opportunity to discuss them.

The New England district of the association planned many attractive activities for the membership. The members were taken on an interesting drive through near-by points to Cedar Hill, the charming country estate of the Massachusetts Girl Scouts, where they were served tea. Ida Smith, superintendent, Children's Hospital, invited members of the executive committee and workers interested in children's hospitals to tea one afternoon. Participants in the general activities of the National Conference of Social Workers were offered many other tempting features.

This is the largest meeting the association has ever had. Delegates came from as far west as California, as far south as New Orleans, and from Canada.

The meetings next year will be held in Minneapolis.

## National Health Institute Receives President's Approval

President Hoover has approved a bill providing for the creation of a national health institute in Washington, D. C., under the auspices of the United States Public Health Service.

The bill was signed in the presence of Senator Ransdell of Louisiana, its author; Dr. Charles H. Kertz, Chemical Foundation, New York City, and Dr. J. W. Kerr, assistant surgeon general, United States Public Health Service.

President Hoover used two pens in signing the bill, one of which was presented to Senator Ransdell and the other to Doctor Kerr for the Public Health Service.

The bill authorizes an initial appropriation of \$750,000 for the construction and equipment of buildings and the Secretary of the Treasury is authorized to accept donations for use in ascertaining the cause, prevention and cure of diseases affecting human beings.

The bill also provides for the establishment of research fellowships within the institute, the scientists to work both in this country and abroad.

"I think the bill is one of the most important ever enacted by Congress in the interest of humanity," Senator Ransdell said.

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## News of the Month

### Relation of State to National Groups Discussed at New Jersey Meeting

The New Jersey Hospital Association held its sixth annual convention in Atlantic City, May 22 and 23. The New Jersey Occupational Therapy Association also held its third annual convention there on the same dates.

Officers for the hospital were chosen for the coming year as follows: president, Dr. Earl H. Snavely, Newark City Hospital, Newark; president-elect, Dr. George O'Hanlon, Jersey City Hospital, Jersey City; vice-president, Mrs. Daisy C. Kingston, R.N., Somerset Hospital, Somerville; treasurer, Thomas J. Golden, Jersey City Hospital; secretary, Marie Louis, R.N., Muhlenberg Hospital, Plainfield; executive secretary, Charles Dwyer, Newark City Hospital.

Important resolutions were passed as follows: to place past presidents of the association on the executive committee; to set a minimum rate of \$4 a day for public liability accident cases; to recommend to hospitals the employment of nurses who are registered in the state or who express their intention of registering immediately.

President John G. Martin's address was favorably commented on, especially that part that dealt with the proper functions of state hospital associations and their relations to the national hospital organizations.

#### State Groups Should Discuss Local Problems

"It would seem," said Mr. Martin, "that in our state associations where we are close to concrete problems, we should discuss rather minutely our local affairs. Through interchange of experiences, telling the results of experiments and discussion of local difficulties, our state association can be of great use. Moreover, within the state group, meetings in various towns may be arranged, as was the case with us during the past winter, where we can carry the ideals, aims and purposes of the state association into the smaller places by means of suitable programs.

"This function of the state associations leads us to believe that the national organizations might well concern themselves with the vast problems and policies that are broad in scope. If, in the national conventions, there were set up seminar courses of instruction conducted by university professors and executives, eminent as well as experienced, many of us would gladly and profitably sit at their feet for instruction and inspiration. Courses of four or five lectures during the week on selected subjects could be exceedingly valuable."

Other speakers on the program included: Dr. Asher Yaguda, pathologist, and Dr. Paul Keller, medical director, Newark Beth Israel Hospital; Anthony M. Ruffu, Jr., mayor of Atlantic City; Dr. George O'Hanlon; Dr. B. S. Pollak, medical director, Hudson County Tuberculosis Hospital and Sanatorium, Secaucus; Dr. Earl H. Snavely, medical director, Newark City Hospital; Dr. Shirley W. Wynne, health commissioner, New York City; Homer Wickenden, general director, United Hospital Fund of New York; John R. Howard, Jr., superintendent, New York Nursery and Child's Hospital, New York City; the Hon. William J. Ellis, commissioner, Department of Institutions and Agencies, New Jersey; Dr. Christopher

Parnall, president, American Hospital Association; Dr. Edward H. Hume, executive vice-president, New York Post-Graduate Medical School and Hospital; Dr. W. J. Monaghan, medical superintendent, Hudson County Hospital, Secaucus; John M. Smith, director, Hahnemann Hospital, Philadelphia; Dr. Emil Frankel, Department of Institutions and Agencies, New Jersey; Mrs. Mary DeGarmo Bryan, editor, *Journal of the American Dietetic Association*; Marie Louis, superintendent, Muhlenberg Hospital, Plainfield; Mary M. Roberts, editor, *American Journal of Nursing*; Florence Dakin, New Jersey State Board of Examiners of Nurses.

### International Congress Delegates to Tour Old World

With the distribution of the preliminary announcement of tours in connection with the International Hospital Congress to be held in Vienna, June 8 to 14, 1931, plans for the congress have taken definite form.

In addition to the congress itself, at which will be presented technical papers by outstanding authorities on hospital work throughout the world, precongress and postcongress tours have been planned which will include visits to hospitals and hospital laboratories in Europe.

The delegates from America will sail from New York on May 14 and 15. Countries to be visited on the tour include England, Denmark, Germany, Hungary, Switzerland, France and Italy. The steamers carrying the hospital tourists will arrive in New York, August 3.

### Mt. Sinai Hospital, New York, Builds for the Patient of Moderate Means

Mt. Sinai Hospital, New York City, is building a new eleven-story structure that will be devoted exclusively to the care of patients of moderate means. The building will provide for 120 patients and, together with the equipment, will cost about \$1,250,000. It is said that this will be the first hospital building erected in New York City to be devoted wholly to the care of patients of moderate means who are unable to afford charges in private rooms, but who are able and willing to pay moderate fees for treatment instead of going into the public wards.

The building will be distinct from other units of the hospital, although communicating with them and sharing the heating plant, laundry and technical services.

According to Dr. Joseph Turner, director of the hospital, the cost of the accommodations in the new building will be approximately half that in private rooms. It will range from \$5 to \$6 per day per bed (each in its own cubicle) including floor nursing service by pupil nurses, as compared with \$10 to \$15 per day in the private pavilion. The building is especially planned so that all or any part can utilize group nursing by graduate nurses at a cost which will be less than half the present figure of \$17 for day and night graduate nursing in the private rooms. The question of adapting the fees of the physicians and surgeons to the needs of the middle class patients is now receiving consideration by the hospital.



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## News of the Month

### New York City Plans for Its Chronically Ill

A far-reaching program to provide more adequate facilities for the care of chronically sick persons in municipal institutions is being planned by the department of hospitals, New York City, and is partially under way, it is announced in a bulletin of the Welfare Council that went recently to executives and board members of the 725 health and welfare agencies that constitute this council.

The city's plan for giving more comfort, care and convalescent help to the chronically ill was outlined, the bulletin says, in recent conferences between Dr. J. G. William Greeff, commissioner of hospitals, Homer Folks, chairman of the executive committee of the council, and chairman of the city visiting committee, and William Hodson, executive director of the council. Mr. Hodson had reported to the commissioner the preliminary findings in the Welfare Council's study of the care of the chronically sick showing the inadequacy of municipal facilities for this purpose, the crowded conditions in city hospitals and the ill effects that these conditions have on chronically sick patients.

The hospital department's plans for the next several years which are expected to increase and improve the city's facilities for the care of the chronically sick, as reported to the Welfare Council by Commissioner Greeff, are summarized as follows:

Appropriation of \$4,000,000 has been requested for the construction of a new cancer hospital to include 400 beds, but it will be at least two years before this hospital is constructed.

Plans have been drawn, following largely the recommendations of the city visiting committee based on a survey of the living conditions in municipal institutions, for a large extension of the present facilities at the municipal farm colony on Staten Island near Sea View. Ultimately the city plans to have an institution of 3,000 beds at this place. These facilities will be primarily for care of the aged and the plans contemplate infirmaries for the chronically sick among the aged.

### Facilities for Tuberculous Increased

An appropriation is being asked for a 300-bed increase in the facilities for the care of the tuberculous at Otisville. The new buildings, Commissioner Greeff said, would probably be used for incipient cases; \$850,000 is being asked for immediate extensions at Otisville and the department plans contemplate a request for \$2,000,000 for extensions there later.

A 400-bed general hospital is being planned for Queens. This, Commissioner Greeff said, will be primarily an emergency hospital handling chiefly acute cases but it would also handle some chronically sick cases.

A new building for male employees and a new kitchen at Welfare Island will make it possible to utilize the present dormitories for 100 additional beds for chronic patients.

An addition to Cumberland Hospital for which appropriation is being asked will provide 350 to 400 beds.

While no separate municipal institution for housing chronically sick cases exclusively is at present contem-

plated, other than the cancer hospital and Otisville Tuberculosis Hospital extension, the addition of general hospital facilities in Queens and the farm colony development would relieve many of the existing municipal institutions and so provide in them more beds for patients who are chronically sick.

### \$1,500,000 Building Program Announced

Extension plans that involve an outlay of more than \$1,500,000 are in progress at Notre Dame Hospital, Montreal, Canada. A new wing, with a capacity of 210 beds, and with quarters for the nursing staff will be built, as well as a separate central heating building. The new building, with all the necessary equipment, clinics, laboratories, dispensaries and quarters for scientific research, will also mean increasing the medical staff.

Last year Notre Dame daily turned patients away because of the lack of room. The 5,946 patients who were treated in the hospital spent 96,591 days there, or an average of 16.08 hospital days for each one of the patients.

### Coming Meetings

#### American College of Surgeons.

President, Major General Merritte W. Ireland, Surgeon General, U. S. Army, Washington, D. C.  
Director General, Dr. Franklin H. Martin, 40 East Erie Street, Chicago.

Next meeting, Philadelphia, October 13-17.

#### American Dietetic Association.

President, Anna E. Boller, Riverside, Ill.  
Business manager, Dorothy Lenfest, 25 East Washington Street, Chicago.

Next meeting, Toronto, September 8-10.

#### American Hospital Association.

President, Dr. Christopher G. Parnall, Rochester General Hospital, Rochester, N. Y.  
Executive secretary, Dr. Bert W. Caldwell, 18 East Division Street, Chicago.

Next meeting, New Orleans, October 20-24.

#### American Occupational Therapy Association.

President, T. B. Kidner, 175 Fifth Avenue, New York City.  
Secretary-treasurer, Mrs. Eleanor Clarke Slagle, 175 Fifth Avenue, New York City.

Next meeting, New Orleans, October 20-24.

#### American Protestant Hospital Association.

President, Luther G. Reynolds, Seattle General Hospital, Seattle, Wash.  
Executive secretary, Dr. Frank C. English, Hyde Park, Station O., Cincinnati.

Next meeting, New Orleans, October 17-20.

#### Association of Record Librarians of North America.

President, Mrs. Jessie Harned, Chicago.  
Corresponding secretary, Ruth T. Church, Boston City Hospital, Boston.

Next meeting, Philadelphia, October 13-18.

#### Catholic Hospital Association.

President, Rev. Alphonse M. Schwitalla, S. J., dean, Medical School, St. Louis University, St. Louis, Mo.  
Executive secretary, M. R. Kneifl, 1327 South Grand Boulevard, St. Louis, Mo.

Next meeting, Washington, D. C., September 1-5.

#### Children's Hospital Association of America.

President, Dr. Howard Childs Carpenter, 1805 Spruce Street, Philadelphia.  
Secretary-treasurer, Bena M. Henderson, Milwaukee Children's Hospital, Milwaukee.

Next meeting, New Orleans, October 20-24.

#### Ontario Hospital Association.

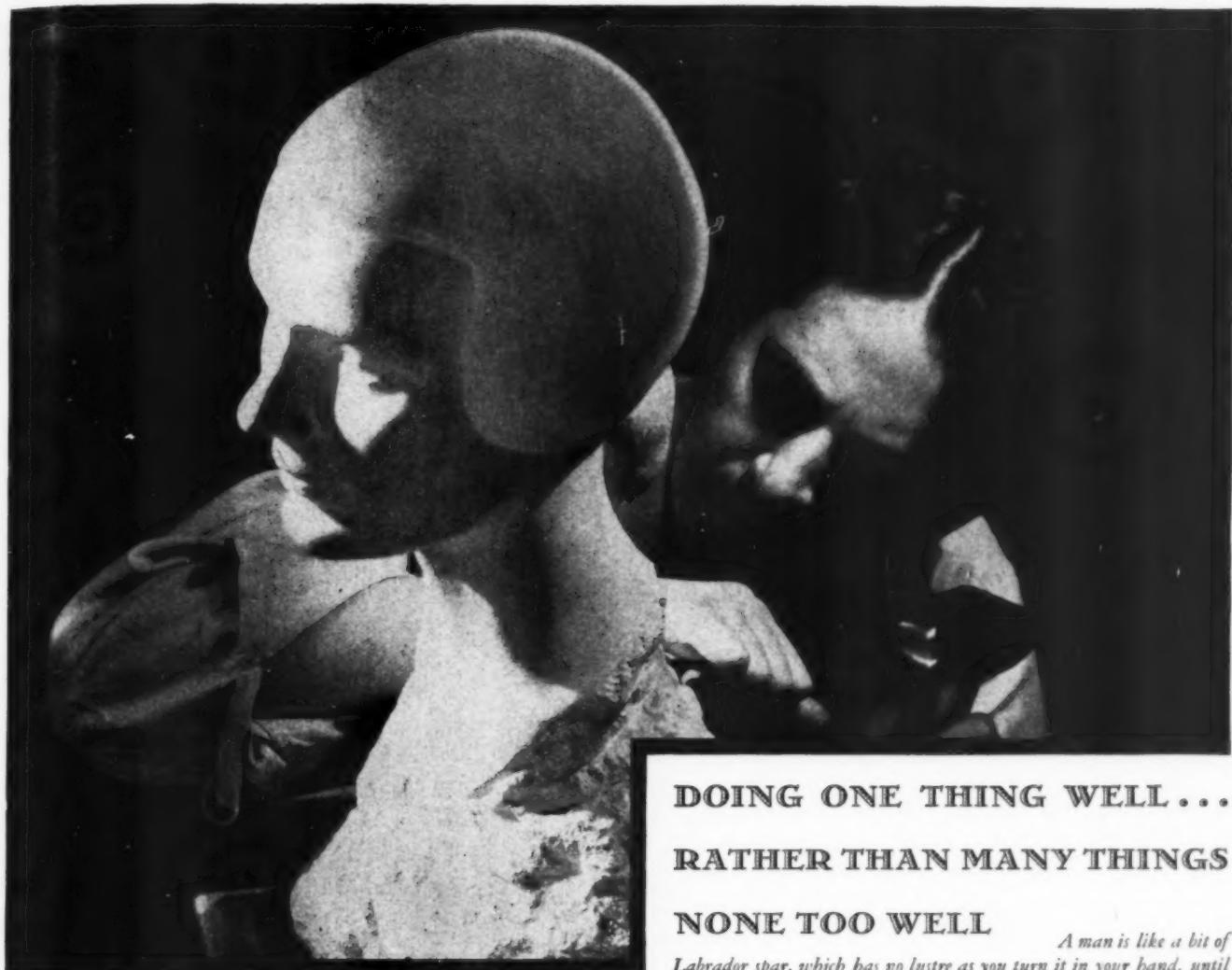
President, R. H. Cameron, 62 Wells Hill, Toronto.  
Secretary-treasurer, Dr. F. W. Routley, Medical Arts Building, Toronto.

Next meeting, Toronto, October 1-3.

#### Western Hospital Association.

President, Dr. Fred C. Bell, Vancouver General Hospital, Vancouver, B. C.  
Secretary, Grace Phelps, Doernbacher Memorial Hospital, Portland, Ore.

Next meeting, Vancouver, August 19-22.



## DOING ONE THING WELL...

## RATHER THAN MANY THINGS

### NONE TOO WELL

*A man is like a bit of Labrador spar, which has no lustre as you turn it in your hand, until you come to a particular angle; then it shows deep and beautiful colors. There is no adaptation or universal applicability in men, but each has his special talent, and the mastery of successful men consists in adroitly keeping themselves where and when that turn shall be of:enest to be practiced. —EMERSON*

**A**BUSINESS, like an individual, may choose to grow by ever widening the circle of its activities—Or, it may develop along one line and constantly become more expert in that field.

The Davol Rubber Company long ago elected to hew to one line . . . to specialize. And from among the many thousands of rubber products, it chose to manufacture rubber sundries. It is due to this specialization that Davol is the largest exclusive manufacturer of rubber goods for use in the hospital and sick room.

Davol rubber goods, identifiable by the Davol trade mark, are sold by leading surgical and hospital supply houses. Ask for them by name.

**DAVOL RUBBER COMPANY**  
PROVIDENCE, RHODE ISLAND



**MADE  
BY DAVOL**  
Water Bottles  
Tourniquets  
Empyema Tubes  
Pure Gum Bandages  
Air Mattresses  
Umbilical Belts—  
and other rubber sundries

## Personals

DR. LESLIE H. WRIGHT, for many years assistant to DR. JOSEPH B. HOWLAND, superintendent, Peter Bent Brigham Hospital, Boston, has been named superintendent of the Genesee Hospital, Rochester, N. Y.

DR. CHARLES F. READ, Chicago, has been chosen managing director of the Elgin State Hospital, Elgin, Ill. DOCTOR READ succeeds DR. RALPH G. GINTON, who has been transferred to the state's new mental hospital at Manteno as managing officer. DOCTOR READ served as state alienist from 1921 to 1925.

DR. F. M. GROGAN has been appointed superintendent of State Hospital No. 3, Nevada, Mo. DOCTOR GROGAN was formerly connected with the Glenwood Sanatorium, St. Louis. He succeeds DR. GEORGE A. JOHNS who becomes superintendent of the St. Joseph State Hospital, St. Joseph, Mo.

CAPT. JESSE H. MAEL is the new superintendent of Ottumwa Hospital, Ottumwa, Iowa. CAPTAIN MAEL was formerly with Station Hospital, Fort Lewis, Wash. He succeeds EDITH M. HARTSUCK.

CECILE TRACY SPRY, superintendent of nurses, Tacoma General Hospital, Tacoma, Wash., has been appointed superintendent of Hahnemann Hospital, Portland, Ore. EDNA DUSKIN, instructor of nurses, succeeds MRS. SPRY.

DR. JESSE D. RILEY, formerly of El Paso, Tex., has been appointed superintendent of the Arkansas Tuberculosis Sanatorium, Booneville.

DR. KENNETH J. TILLOTSON has been appointed superintendent of the McLean Hospital, Waverley, Mass. He has been acting superintendent of the hospital since last December when DR. FREDERICK H. PACKARD resigned.

MRS. MAISSIE LOWRY is the new superintendent of City Hospital, Altus, Okla. MRS. LOWRY will also officiate in the operating room.

DR. EUGENE B. PIERCE, director of health in the public schools of Flint, Mich., for the last five years, has been appointed superintendent of the Molly Stark Sanatorium, Canton, Ohio, to succeed DR. H. O. BLACK, resigned. DR. STANLEY SIDENBERG, who has been acting as superintendent since the position became vacant, will remain on the hospital staff.

DR. H. V. SCARBOROUGH has resigned as superintendent of the Iowa State Tuberculosis Sanatorium, Iowa City, to accept a similar position at the Marion County Tuberculosis Hospital, Sunnyside, Ind.

JOHN A. TINSLEY, superintendent, Woodbine Colony for the Feeble-Minded, Woodbine, N. J., has resigned.

DR. FRANCIS RANDOLPH CRAWFORD who has been doing surgical work at Farmville, Va., for the last two and a half years, has been chosen directing head of Presbyterian Hospital, Kashing, China. DOCTOR CRAWFORD already has served fourteen years in China as a medical missionary.

JOHN E. RANSOM, who has served Toledo Hospital, Toledo, Ohio, as superintendent for the last four years, has resigned to become assistant director of Johns Hopkins Hospital, Baltimore. DR. WINFORD H. SMITH is the director of Johns Hopkins Hospital.

GERTRUDE HODGMAN, superintendent of nurses, Toledo Hospital, Toledo, Ohio, has resigned to become dean of the school of nursing, Peiping Union Medical College, Peiping, China.

MARGARET M. REILLY has been named acting superintendent of Starling-Loving Hospital, Columbus, Ohio, to fill the vacancy left by CHARLES E. FINDLAY who recently became superintendent of Springfield City Hospital, Springfield, Ohio.

L. GERTRUDE DEVINE, R.N., has been appointed superintendent of Sherman Hospital, Sullivan, Ind.

JENNIE WALKER has been named superintendent of the Nathan Littauer Memorial Hospital, Gloversville, N. Y., succeeding CHARLOTTE M. POWELL, resigned. Miss WALKER has been superintendent of nurses and assistant superintendent of the hospital for the last five years.

HENRY A. HIGGINS has assumed charge of the Long Island Hospital, Boston.

ELLEN C. DALY has been elected superintendent of the Knox County General Hospital, Rockland, Me. Miss DALY resigned last October from the Boston City Hospital, Boston, where she had served eighteen years, the last ten as superintendent of nurses and principal of the training school. MISS DALY succeeds MISS A. ROYCE.

DR. MICHAEL J. THORNTON has been named acting general medical director of the New York City hospital department's institutions on Welfare Island and in the Bronx. He succeeds DR. WALTER H. CONLEY who will retire on a pension on August 1. DOCTOR CONLEY sailed recently for Europe.

GRACE L. ELGIN has been appointed superintendent of the North Carolina Orthopedic Hospital, Gastonia, N. C. MISS ELGIN was previously connected with the James Lawrence Kernan Hospital and Industrial School for Crippled Children, Hillsdale, Md.

SISTER M. JOSEPHA is the new superintendent of St. Joseph's Hospital, Mishawaka, Ind. She was formerly with St. Mary's Hospital, Superior, Wis. SISTER JOSEPHA succeeds SISTER M. CHRYSOSTOMA who is now superior of St. Mary's Hospital, Centralia, Ill.

MISS J. J. WILLETT, manager, Unity Union Hospital, Unity, Sask., has resigned. Her work will be taken over by JOSEPH NEEDHAM. MISS WILLETT plans to leave the hospital field.

MILDRED CONSTANTINE, A.B., R.N., for eight years principal, school of nursing, Montefiore Hospital, New York City, has accepted a position as superintendent of nurses, Newark Beth Israel Hospital, Newark, N. J. MISS CONSTANTINE is succeeded by GRACE G. GRAY, a graduate of Hebrew Hospital, Baltimore, Md.

# Not even hospital patients will always eat the prescribed meals

*Any food that offers real attraction in addition to a particular efficiency is worth the dietitian's noting*

Where diet is concerned, it is well known, of course, that it is the *patient himself* that most frequently stands in the way of his own convalescence or cure—not inefficiency on the part of the hospital or its foods.

How many more cases of chronic constipation could be relieved or cured if those for whom the doctor has prescribed more vegetables, the drinking of more water, or agar-and-oil would stick to the letter of his advice? Your nurses try to make patients do this, but how many trays come back completely cleared?

The fact is, there is an increasing need for methods that are *psychologically* as well as mechanically more effective in the treatment of constipation.

It was with this need in mind that the H. J. Heinz Company eight years ago began experiments to develop an especially delicious breakfast cereal which would not be in the least suggestive of a "health food", yet effective in its content of bulk and roughage. That cereal is the new HEINZ Rice Flakes—a type of food that millions like, and, therefore, accept immediately. Not even children can resist its flavor so they *don't* resist its benefits.

## NOT A BRAN FOOD

This cereal is different from all others. It includes no bran. A highly refined cellulose—a part of rice itself—is retained in place of bran.

This cellulose is soft and fluffy, not harsh or irritant in any way.

It has great absorption power. Its

## FREE Make this trial of Cellulose in this New Form

Below we offer you an easy way to try this new method entirely at our expense.

E. R. Harding, M. A., Fellow of Mellon Institute of Industrial Research, Pittsburgh, in a recent publication, says, "That cellulose is both a natural and valuable food constituent is evident. That it's practically essential is not too extravagant a claim. It is found widely distributed in nearly all natural vegetable foods. It is particularly high in celery, lettuce, cabbage, spinach and asparagus. Fruits like oranges, lemons, grapefruit and others of this type, contain considerable amounts of it."

volume increases *four to six times* after eating, forming one of the mildest, gentlest, yet most effective types of natural bulk and roughage known.

In conclusive tests by unprejudiced authorities, all but the most stubborn cases of constipation responded to this new, attractive treatment.

## 275 FORMULAE

275 formulae were created and tested and special processes invented before this unique new cereal was perfected.

Now it is ready to aid all who are interested in its new advantages—delicious flavor, high nutrition and roughage vegetable effect.

Even children want this food for itself alone—its enticing flavor and fairy-like daintiness of texture.

Of course we do not advocate HEINZ Rice Flakes in place of vegetables in any

case. But people who don't like vegetables and, therefore, do not eat enough of them are thus given a *supplemental* bulk-and-roughage in a most palatable form.

And being as natural as rice and vegetables themselves, anyone can eat HEINZ Rice Flakes daily throughout a lifetime with only good results.

You may eventually resort to HEINZ Rice Flakes in a large majority of all your cases of chronic constipation, and especially where bran-foods are too severe for certain intestinal conditions.

## SEND COUPON

We want you to try HEINZ Rice Flakes to prove their value. Simply mail coupon below and we'll have a HEINZ representative call on you and furnish you with free samples to try at our expense.

We'll send also some interesting additional information about HEINZ Vegetable-Cellulose on receipt of coupon.

### Mail This

H. J. HEINZ COMPANY  
Dept. D-16, Pittsburgh, Pa.

Please have your salesman call. Also please mail, free, full information about HEINZ Rice Flakes and the vegetable-cellulose contained therein.

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Manufactured solely by

H. J. HEINZ CO. • Pittsburgh, Pa.

# HEINZ RICE FLAKES

## News of the Month

### North Carolina Meeting Attracts More Than 200 Delegates

More than 200 delegates from North Carolina hospitals participated in the annual convention of the hospital association of that state, held in Gastonia, May 27-29. Dr. L. V. Grady, Carolina General Hospital, Wilson, was elected president for the coming year and Edwin Farmer, business manager, Carolina General Hospital, secretary.

Dr. W. S. Rankin, director, hospital section, Duke Endowment, discussed the preliminary report of the 1929 appropriations. He said that the sum of \$1,142,642 was distributed among ninety hospitals—\$608,188 going to hospitals of the Carolinas in the form of an allowance of \$1 a day for service to indigent patients, and \$536,433 going to certain hospitals for new buildings or additions.

Lula West, field representative, North Carolina Nurses' Association, compared the status of nursing schools in 1925 and 1929. In 1925, she said, there were only six hospitals with a full-time instructor. In 1929, there were twenty-six. Miss West cited other figures as evidence of the progress that had been made in the last five years.

Prominent among the out of state visitors was Dr. Joseph R. Morrow, Bergen Pines, Ridgewood, N. J.

At the public meeting held on the evening of the second day, the Right Rev. William J. Hafey, bishop of Raleigh, and Mrs. W. T. Bost, commissioner, state department of welfare, were the principal speakers.

Others who took part in the program included: Dr. D. A. Garrison, Gaston Sanatorium, Gastonia; Dr. John B. Williams, St. Luke's Hospital, Richmond, Va.; M. E. Winston, Duke University Hospital, Durham; Bessie Baker, Duke University Hospital; Sherwood Brockwell, state fire engineer, Raleigh; Nellie F. McCown, Wilson; Dr. Bert W. Caldwell, American Hospital Association; Helen McGrath, occupational therapist, North Carolina Orthopedic Hospital, Gastonia; Dr. O. L. Miller, North Carolina Orthopedic Hospital; Dr. R. H. Lafferty, Charlotte; Matthew O. Foley, *Hospital Management*, Chicago; C. C. Benton, Wilson; Dr. Harry L. Brockman, High Point; Dr. R. B. Davis, Greensboro; Mrs. Z. V. Conyers, secretary, board of nurse examiners; Dr. Addison G. Brenizer and Col. Hamilton Jones, Charlotte.

### New Psychiatric Wards and Nurses' Home at Providence City Hospital

New psychiatric wards and a roomy nurses' home costing \$700,000 were dedicated recently at Providence City Hospital, Providence, R. I. The new wards are to be designated merely as H and I, and the term "psychiatric" avoided as much as possible. This will be done in order to take the stigma from mental disorders, according to Dr. Dennett L. Richardson, superintendent of the hospital. It will, he says, do much toward bringing in the timid who really should have trained supervision and treatment for cure and prevention rather than letting them go along, hidden and sheltered, growing gradually worse.

The building is fireproofed throughout and has an automatic elevator. It has thirty-two beds for adult patients, two children's dormitories and eighteen beds in single

rooms, a total of sixty-four beds. Women and girls will be treated on the upper floors, while the second floor is given over to men and boys. The wards are to be temporarily in charge of Dr. George O. Elliott, Butler Hospital, Providence.

The nurses' home is of the same materials as the psychiatric building. It comprises 139 rooms for nurses, together with office suites, classrooms and an auditorium-recreation room.

### Ohio Hospitals to Study Automobile Accident Problem

The study of the automobile accident problem, as it pertains to Ohio hospitals, will begin on July 1. This study will include every general hospital in the state and an analysis of their loss in caring for automobile accident victims, for the period from July 1, 1929, to June 30, 1930, will be made. It is hoped that every hospital will be prepared to furnish the necessary data, so that plans may be made to secure relief from this problem for the hospitals of Ohio.

### New York Will Spend \$21,000,000 on Hospital Program

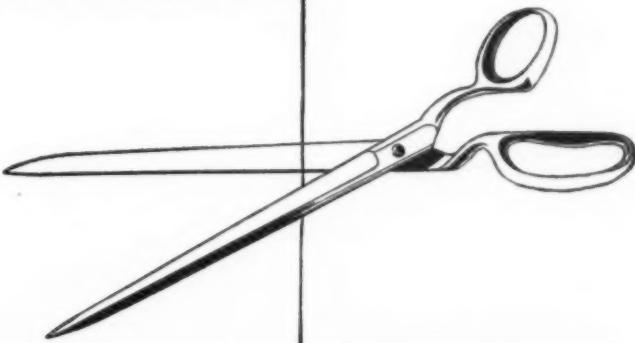
The Department of Hospitals of New York City is now committed to a \$21,000,000 program of hospital construction and improvement to be carried out over the next three or four years, under action taken recently. The actual amount set aside for the coming year was \$5,000,000, since the immediate outlays on the three or four-year program will be merely for the formulation of plans, architects' services and in some cases to start the construction of the new buildings.

### Rochester General Builds Out-Patient Unit in Record Time

Eight months ago the old out-patient department building at Rochester General Hospital, Rochester, N. Y., was razed. To-day a new structure, completely outfitted with the most modern equipment, is receiving patients in its various departments.

From a spacious entrance lobby, paneled in oak, on the first floor, there is convenient access to the social service department, where patients may be interviewed in privacy. On this floor are the office of the medical supervisor, the pharmacy and the examining room for the clinics of medicine and children's diseases. The basement, which is high and virtually above ground, will furnish headquarters for the clinics of dermatology and urology. On this floor there is a well equipped lecture and demonstration room for all clinics. Health demonstrations of various kinds will be conducted in this room, among them the class for diabetic patients. The second floor is devoted to surgery and the surgical specialties, including orthopedics, nose and throat, eyes, dental and maternity.

# Life may hang by a "thread"



IN THE technique of the operation itself, you depend upon your skill as a surgeon. Every moment, almost every gesture, follows a carefully conceived plan. Yet—after the patient has been wheeled from the operating room—his recovery is influenced by another factor beyond your control. In the ligatures you use to suture the wound, life may literally hang by a "thread."



Naturally, the ligatures you use are surrounded with every safeguard after they reach the hospital. But what about their source? Were they processed by an institution of the highest integrity?

For more than thirty years now, the Armour Laboratory has anticipated the requirements of the medical profession for medical supplies of animal origin. An unlimited amount of fresh material is matched by the most modern methods of manufacture. Armour ligatures are known the world over, as the finest produced. They are strong—smooth—sterile and uniformly absorbed. They can be obtained in all the standard types and sizes. Have us send you samples.

Whenever a case indicates the use of pituitary liquid or concentrated liver extract, you will find the Armour products equally dependable.

**ARMOUR AND COMPANY**

Chicago



## NURSING AND THE HOSPITAL

Conducted by M. HELENA McMILLAN, R.N.,  
Director, School of Nursing, Presbyterian Hospital, Chicago

# What the Nursing School Must Do Before It Seeks Endowment\*

By ADDA ELDREDGE, R.N.  
Director, Bureau of Nursing Education, State Board of Health, Madison, Wis.

THE very sound of the word endowment is stimulating. But when it is pluralized and transformed into "endowments for schools of nursing," it opens up a promising vista for the person whose life interest is not in one school but in many schools of nursing. Yet there are only two schools of nursing that are really endowed—Yale University with its \$1,000,000 endowment given by the Rockefeller Foundation and Western Reserve University with its \$1,500,000 endowment given by Mrs. Chester Bolton.

There are many forms of endowment. A hospital superintendent told me recently about an endowment for a school of nursing that had been used for the building—a buried endowment. There may be many such endowments.

Sally Johnson, Massachusetts General Hospital, Boston, writes that the work on the endowment there has been at a standstill for the past few years. Miss Johnson sent me a copy of the deed of gift. The sum is about \$21,588.91. The deed specifies how the endowment is to be managed, used and ultimately disposed of should the school be given up. E. M. Lawler, Johns Hopkins Hospital, Baltimore, replies that the alumnae committee is still holding the money already obtained until a larger sum is collected. She states that the school has two small sums that might be termed endowments. The interest on one is used to support the library; the other is used only for the pleasure and happiness of the nurses.

### How One Hospital Has Been Helped

Columbia Hospital, Milwaukee, has the Cora Schwandt Memorial Award, a character award of which the following is an extract: "The Cora Schwandt Memorial Award of \$100 is to be presented annually to the pupil nurse in the Columbia Hospital training school who during the past year, by her womanliness and devotion to her duties combined with initiative in her work, has most nearly attained the highest ideal of the nursing profession." The late Doctor Copeland of Milwaukee left one-third of the residue or remainder of his estate for a school of

nursing endowment for Columbia Hospital, but whether that will mean much or little is not yet known. While Doctor Copeland was always a tower of strength to the superintendents of nurses of Columbia Hospital, his being on the school of nursing committee made him realize fully the needs of the school. Many schools of nursing have scholarships and awards and some of these are in the form of endowments.

### Would State Subsidies Be Practicable?

Years ago, I visited the Frederick Ferris Thompson Hospital, Canandaigua, N. Y., and was told of a small endowment that was used to pay their lecturers. Time and hospital needs combined seem to have swallowed up this endowment, for a letter from the present superintendent of nurses says, "In reference to the endowment of the Frederick Ferris Thompson, we wish to say that it is used for the hospital deficits incurred by salaries and general expenses. Endowment money is not used specifically for lectures or for school of nursing equipment. These expenses are met by gratis courses by members of our staff and by contributions from various organizations." Has someone forgotten for what this endowment was to be used or did I dream that they once had it?

What is meant by state subsidies for schools of nursing is somewhat vague to me. In foreign countries where hospitals are all under the supervision of the state, of course schools of nursing are too. For instance, Finland's new director of nursing education finds almost nothing impossible under the board of health and is arranging for several central schools where the preliminary theory may be given and students then sent back to the hospitals. This is done at the government's expense. In reality, this is not unlike some of the university or central schools.

University schools, like all other schools of nursing, count on a sufficient number of student nurses to care for the patients. The central training of nurses would be a difficult and expensive proposition to the state unless the students paid their full tuition. Can the state subsidize all the small hospitals that now run schools of nursing? Would not the scheme that was propos-

\*Read at the joint meeting of the Illinois, Wisconsin and Indiana Hospital Associations, Chicago, February 20, 1930.



## He Chases Grim Shadows From Thirsty Lips with This New Fountain

In this fountain, the CLOW Soldier of Sanitation has created an artificial, refreshing spring that is as safe and fool-proof as human ingenuity can make it. Every drinker is carefully guarded from possible contamination of lips that drank before.

The owner is protected against the mischievousness and irresponsibility which every public plumbing feature must meet.

The angle stream has its source beneath a protecting hood under which lips cannot get. That source is well above the top level of the waste bowl. Should the waste become clogged, willfully or accidentally, the waste water can never reach the drinking stream spout, to carry contamination to a drinker's lips.

The stream cannot be squirted by mischievous children. Place a finger over the

opening, and the water merely runs down into the bowl and into the waste, because of exclusive CLOW double opening design.

Thus the CLOW Soldier of Sanitation gives you a new drinking fountain, which more than meets every health specification or recommendation.

What he has done here is typical of his work to defeat high costs and the grim ghosts of insanitation.

The fountain pictured is available in either pedestal or wall-hung types.



*The CLOW Soldier of Sanitation is working for you in the CLOW Plant as well as in the field. New designs, refinements, careful testing are his contributions. In the picture you see Karl Wernle, Sanitary Engineer of the plumbing division, Chicago.*

**CLOW**  
CHICAGO  
PREFERRED FOR EXACTING PLUMBING SINCE 1878  
Consult your architect

Indiana—a subsidy of \$500 to each hospital for each nurse graduated—be an incentive for hospitals to start small training schools and to graduate incompetent and uneducated nurses? Would it not first be necessary to say how many schools of nursing the state should have, how many students should be trained and how many and what hospitals should be used? Should not some central group select the students, outline the curriculum and set a ratio of graduates to students that must be maintained to safeguard the student, the school and the public?

Do we not also need to prevent those gaps in the continuity of schools of nursing—the period between the tenures of office of the members of that ever changing group of superintendents who are selected at random and are judged by no criteria of education, experience or ability, who, on their side, find no reports to show what has been done and who, when they move on, leave the same chaotic condition behind them? In most schools there is a group familiar with the plans, but the entire responsibility is placed on the superintendent of the hospital who, although he is trained for his own job, is seldom an educator and hardly fitted to have the whole responsibility of selecting an educator in the nursing courses.

#### *A Philanthropist Is Needed*

If some inspired Carnegie interested in the health of the community would devote his money toward establishing good, sound schools of nursing, safeguarded both as to the preparation of the student and as to the care of the patient and the preparation of the faculty, and if another philanthropist would attach a visiting nurse to the hospital staff of every rural or small town hospital and would open our hospitals for the mentally ill, our tuberculosis sanatoriums, our poor farms and our children's homes to graduate nurses, there would be no surplus of graduates.

With the present organization of nursing schools, or rather their lack of organization, who is going to risk endowing them? The first step towards securing an endowment is to put the school of nursing on a sound basis. Every school of nursing should have a school of nursing committee on which are representatives from the board of trustees, the medical board, the alumnae and the teaching staff. There should be on the committee also a woman of the board or of the community, the superintendent of the hospital and the principal of the school of nursing. The school should be organized, the members of the faculty provided for, salary schedules decided upon, tuition fees scheduled, allowances discussed, hospital statistics studied, the amount of affiliation needed planned for and a reasonable budget agreed upon and presented to the trustees.

A reasonable working day on the wards should be agreed upon—for instance, eight hours for graduates and six hours for students—the number of students needed for such duty determined, the number of graduates on floor duty who will give adequate care to the patients while the students are at class decided, salaries, vacations and illness care discussed, and a fair budget prepared, allocating to the school and to the hospital each the proper share of the salaries and expenses incidental to one or both. Then and only then shall we be able to approach either the philanthropist or the state for endowments or appropriations.

Before we can have endowments, we must have budgets. A tentative budget, made by a Wisconsin superintendent of nurses in a splendid school, found that the student nurses in her school cost on an average of \$818.11 a year.

She had very capably computed the cost, considering the necessary health examinations, the cost of illness and even the upkeep of the tennis court. She made allowance for upkeep and depreciation everywhere. Taking this for a basis, we have estimated that the student nurse during her preliminary term makes no return to the hospital but that in the second semester or the last eight months of the first year she averages fifty-two hours a week of actual ward work and is easily worth 30 cents an hour or a total of \$811.20; that during her second year she works a total of 52 hours a week for 52 weeks at 40 cents an hour which would mean \$1,081.60; in the third year she works 52 hours a week for 52 weeks at 50 cents an hour which would mean \$1,352. The total for the three years, therefore, is \$3,244.80. If we assume that this budget is approximately correct, we find that the student during her training costs the hospital \$2,454.33 and that she contributes in service \$3,244.80. It would seem that she had paid in work to the hospital \$790.47 above what her education has cost the institution. Why is it that none of the budgets presented appear to take this student service into consideration? Yet, before we are ready for endowments, we must have evaluated all that we receive as well as what has been given.

In the meantime, let us think of a way in which we may secure money for the school of nursing, the beginning of an endowment. I will call this an "intriguing" method. The majority of the schools of nursing pay an allowance of from \$5 to \$15 a month. Few students need this; for those who do, a loan fund can be provided, either with or without interest. Let us assume that there are 90 students in the school, 30 in each class. The first-year students receive \$5 a month after the preliminary course or \$5 for eight months, a total of \$1,200. The 30 second-year students receive \$8 a month or a total of \$2,880 a year. The 30 third-year students receive \$12 a month or \$4,320, making the total payment for allowance, \$8,400. What school could not improve its work if it had \$8,400 to add to its budget?

Let us take a school that has only 30 students who are given an allowance of but \$5 a month for the three years. Counting eight months the first year and twelve months for the other two years, we have \$1,600 for a school for which the superintendent ordinarily hesitates to buy the necessary classroom equipment. I am not making the suggestion that the hospital saves this amount by not paying an allowance, but that the student who often wastes the allowance receives a better education and this can never be wasted. Not for a moment would I suggest that this allowance be taken from the student unless it can be returned to her a thousandfold in better teaching and better equipment. When we remove nursing schools from the unorganized apprenticeship stage, we shall have a better right to approach the legislature or the philanthropist for help to endow schools of nursing, but not until then.

#### *A Magazine for Nurses in All Countries*

A magazine to which nurses from all over the world will contribute is the new *International Journal of Nursing*, which was until January, 1930, the *I. C. N. Bulletin*.

The January issue of the new publication contained articles in English, French or German, according to the native language of the author. Longer articles in French and German were translated into English for those who understand only that language.

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*This delicious food drink is ideal for children and convalescents who dislike milk—yet require it for nutritional purposes.*

**COCOMALT** contains the nourishing elements of barley malt, cocoa, sugar, eggs, milk proteins and milk minerals.

It is not a powdered chocolate, not merely a malt or cocoa mixture . . . but a scientific food-concentrate of unusually high food value.

Mixed with milk, Cocomalt meets practically every nutritional requirement of children and convalescents. It actually increases the caloric value of a glass of milk 72%—adding 46% more protein, 56% more mineral salts, 188% more carbohydrates.

#### *Quickly assimilated*

While it strengthens and nourishes to a surprising degree, Cocomalt imposes no burden even upon the weakened digestion . . . for it is quickly and easily assimilated. One of the reasons why Cocomalt is so readily assimilated is because of its high enzyme content which greatly assists in the process of digestion.

#### *Contains Vitamin D*

Of particular significance, especially in the treatment of growing children, is the fact that Cocomalt contains Vitamin D in sufficient quantity to be of definite anti-rachitic value.

Laboratory tests show that Cocomalt also contains Vitamin A and B complex—both of which play a vital part in overcoming poor appetite and malnutrition.

Increasing numbers of physicians everywhere are prescribing Cocomalt for expectant mothers, growing chil-



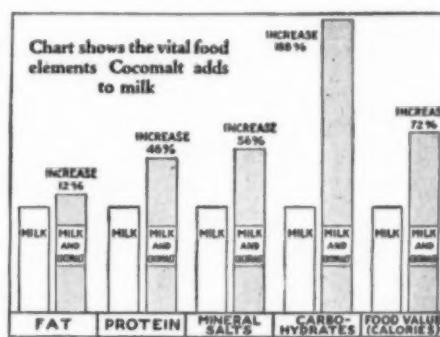
dren, nervous, overworked adults, fretful convalescents. Even those who detest plain milk enjoy the creamy, chocolate flavor smoothness of Cocomalt.

Cocomalt is available at grocery and drug stores everywhere . . . at 30c the  $\frac{1}{2}$  lb., 50c the lb., and in the economical 5 pound family size. It is easy to prepare. Just mix it with milk and it's ready to serve. Equally delicious hot or cold.

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Cocomalt is made under modern, sanitary conditions—packed in airtight tin containers. We would like

to send you a full-sized can for your own use. Fill out and mail this coupon, and you will receive your can of Cocomalt promptly.



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DELICIOUS HOT OR COLD

**ADDS 70% MORE NOURISHMENT TO MILK**



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## DIETETICS AND INSTITUTIONAL FOOD SERVICE

*Conducted by ANNA E. BOLLER, Central Free Dispensary at Rush Medical College, Chicago*

# Where the Dietary Labor Turnover Is Low and the Morale Is High

By LOUISE CLARK

Dietitian, Presbyterian Hospital, New York City

**I**F THE function of a dietary department is the preparation and service of food to all sick and well persons within the confines of an institution, then one of the outstanding characteristics of such departments must be the division of responsibility among the members of the department.

It is from this angle that I am going to discuss the personnel of the dietary department of Presbyterian Hospital, New York City. We are more or less unique in having a large department, divided into two equally responsible sections, one under the charge of the director of the department of nutrition, and the other under the supervision of a steward. The department of nutrition is responsible for all special diets, for the service of food to all patients, for research dietary work and for all teaching. The steward and his department are responsible for all buying, for the preparation of food other than that for special diets and for service to all well persons.

### *Duties of the Dietitians*

Of the sixteen assistant dietitians in the department of nutrition, eight are in the "service" division—four in charge of service to ward patients, three in charge of service to private patients and one in charge of personnel. The personnel dietitian relieves for the ward dietitians during time off duty and during vacations. Each ward dietitian supervises two floors of sixty-four patients each. Thus, there is one assistant dietitian on the medical floors, one on the surgical floors, one on the Sloane maternity floors and one for the other two floors, which are made up of urological, fracture, eye, nose and throat services. Their duties are numerous, but difficult to define. They include, first, adjustment of regular and soft diets to qualitative and frequently quantitative special diets; second, economical ordering of food from the kitchens; third, elimination of waste; fourth, perpetual informal teaching of student nurses and patients; fifth, responsibility for all pantry equipment.

The ward dietitian must have a thorough, practical working knowledge of diet therapy; she must be a good housekeeper; she must have a teaching attitude and, most important of all, she must be interested in the patient. The more practical her knowledge of psychology and

sociology is, the better ward dietitian will she be. Probably I have not listed her duties in the order of importance. In fact, it would be difficult to say which would be considered the most important.

The hospital administrator is of course interested in her money saving possibilities. A computation based on a two-month period showed that the labor cost per meal of all service dietitians, ward and private, was one and eight-tenths cents. That figure may seem high, but it must be remembered that it pays for complete supervision of all work in serving pantries, usually considered a part of the nursing expense; it pays for the service of about 10,000 special diets a month, made up and served as effective variations of the normal, with little additional expense; it pays for detailed, carefully considered economical ordering of food, for better service to all patients and for better instruction to nurses and patients.

The budget allowance per meal for ward patients is twenty cents. For each ward patient the daily average intake of butter is slightly over four ten-gram pats, of 10 per cent cream, 100 cubic centimeters, and of milk, 500 cubic centimeters on the medical and surgical floors, 700 on the fracture and maternity floors, and from 700 to 1,000 on the children's floor. Fruit is served twice a day, two vegetables are served at noon and a salad is served once a day. On the whole, the ward patients are well satisfied, the doctors are convinced that when they order a diet the order is carried out well, and the nurses are willing to admit that diets can be more satisfactorily taught by a dietitian.

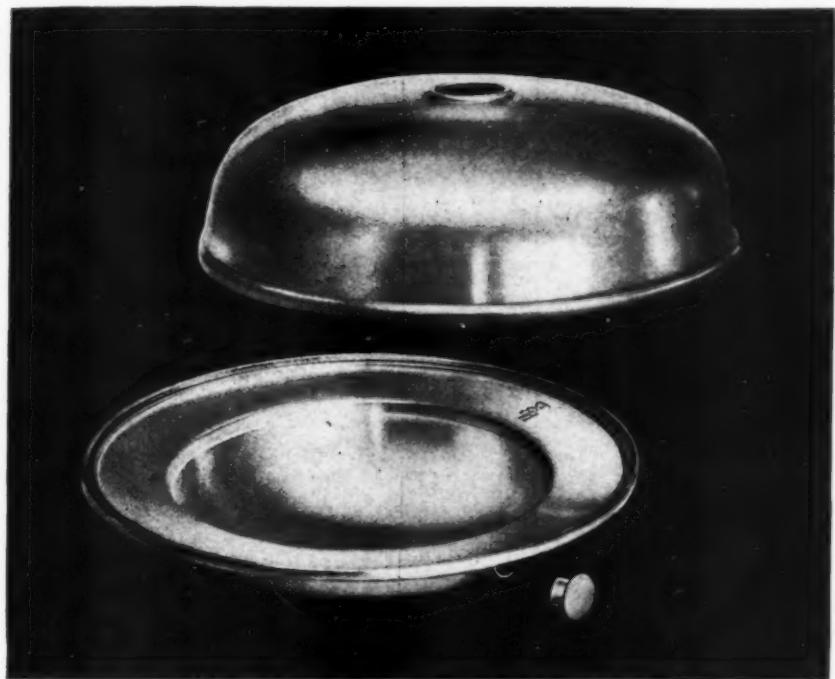
### *"The Guest Is Always Right"*

There are some who will probably wonder about the relation of this service department to the steward's division of the work. The cooperation achieved between the two departments is excellent, more so than I would have believed possible. The motto of the kitchen is more nearly that of a hotel than of any other hospital I have ever seen, namely, that "what is ordered must be served," or the "guest is always right," within reason, of course. There are occasional disagreements but, on the whole, there is a minimum of friction.

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of three assistant dietitians, each responsible for service to approximately twenty-five patients on each of the two floors. A menu system is used. Here the duties of the dietitian are more easily defined. She visits patients on floor care daily, consults with the special nurse on each case when necessary, supervises the service of all trays and is entirely responsible for the dietary satisfaction of the patients. All the work of the pantry and its budget are under her jurisdiction. The private patient is permitted to order practically anything he wishes without additional charge, although the food budget must be kept under sixty-five cents a meal.

#### *Services of the Various Kitchens*

The other eight assistants in the department are divided as follows: three in the weighed diet kitchen, one in the special foods kitchen, one in the research kitchen, one on the teaching staff and two in the out-patient department of the hospital which is now incorporated indistinguishably with the Vanderbilt Clinic.

From the weighed diet kitchen are sent a few unweighed trays for patients who require special catering, and all diabetic and other weighed diets for patients in the hospital and the private building, with the exception of the research trays. Of the three dietitians, one, the charge dietitian, calculates the diets, visits patients, teaches patients and generally supervises the organization. One assistant orders all food, supervises all preparation, teaches nurses and assists in checking trays. The third assistant is responsible only for the preparation and service of weighed trays for the private building. There are six nurses in the kitchen at a time for a period of four weeks each, during which time they are taught calculation and preparation of weighed trays.

The budgeted allowance for raw food per meal is thirty-five cents. From a computation based on a two-month period, it was found that the labor cost per meal averaged twenty-three cents, although the labor cost during months when a capacity number of meals is served is only thirteen cents a meal. The number of trays served in a month averages between 3,100 and 3,400.

From the special foods kitchen are sent all foods cooked without salt, all special orders involving special preparation, such as high caloric or low caloric foods, low fat foods, additional foods for low residue diets and so on through an innumerable list of special foods. The dietitian here must know good food when she sees it and she must be able to inspire mediocre cooks to prepare it; she must have imagination in menu planning and she must possess a keen sense for flavors. Food for about ninety salt-poor trays a day is prepared. Every effort is made to have them prepared and served attractively. A large variety of fruits, vegetables and seasonings is used as well as a comparatively large amount of cream, butter and other expensive foods, so that the dietitian must be a master of economy to keep within her budget. The allowance per meal served is approximately the same as that of the meals served from the main kitchen to the ward and private patients. An additional \$1,000 is allowed per month to cover the expense of the between meal nourishments served to the wards three times a day from this kitchen—at ten o'clock in the morning, at two in the afternoon and at eight in the evening. Approximately 25,000 portions are served monthly.

The research kitchen is an isolated kitchen unit. It is on the medical floor with the research wards. The dietitian in charge orders all food raw from the main kitchen, supervises preparation by the student nurse and the student dietitian, calculates diets, makes rounds with

the doctors and is responsible for the upkeep of her kitchen. Twelve research diets are carefully prepared and served. Patients are visited daily and, before their release, they receive instruction in the method of continuing the diet at home. The budget allowance per meal for raw food is thirty-five cents. The monthly average labor cost per meal is from sixteen to twenty cents.

Of the two dietitians in the clinic, one is in the food clinic room full time and the other is on the pediatric floor. The food clinic is on the medical floor, but it serves all divisions in the dispensary. It is a large, attractive room, fully equipped for teaching, with a small but complete kitchen unit, a blackboard, cupboards, comfortable chairs and tables and wall space for instructive posters. The cheerfulness and comfort of the room promote an easy contact with patients. Each patient is received and individually taught the diet ordered by the doctor. The dietitian adjusts it to his needs, his economic status and his racial and personal food habits. All types of diets are taught. The clinic dietitian must possess an infinite amount of patience, a real human interest in the difficulties encountered by the average clinic patient and a thorough, practical knowledge of diet therapy. She must know foreign foods and dietaries and she must have a certain viewpoint, termed the social service viewpoint.

The dietitian on the pediatric floor of the clinic is a nutrition worker who is ready and willing to discuss dietary problems with the mothers of small children under the physician's direction, who visits the home of the child when necessary and who teaches good nutrition at all times by precept and by demonstration.

The duties of the teaching dietitian are indicated by the name. She plans the courses, both lecture and laboratory, in nutrition and dietetics. She instructs approximately 150 probationers a year, in eighteen one-hour lectures and eighteen two-hour laboratory periods. The juniors are given fifteen formal one-hour lectures in diet therapy, in addition to the perpetual informal teaching done by ward dietitians. The senior medical students are taught by demonstration and lecture throughout the school year. The student dietitians have seminars in nutrition once a week with the teaching dietitian and the director of the department. The student nurses while in the diet kitchen are taught by the case study method under the direction of the teaching dietitian. During the school year, from September to June, with the exception of a month's vacation at Christmas time, the teaching dietitian is busy full time. During the summer months, she relieves on the medical wards, in the clinic and in the weighed diet kitchen. In this way she does not lose contact with the practical work of the department. She also has an opportunity to judge the value of her teaching.

In the department of nutrition there are eighty-five employees, the director, sixteen assistant dietitians, one stenographer, nine student dietitians, forty-two pantry maids and sixteen cooks, maids, truckmen and dishwashers in the three special kitchens.

#### *Fitting the Employee to the Job*

The director of the department is held responsible for the organization of her department, for all property entrusted to her department, for the annual budget and for all creative work necessary or desirable.

To write in detail of the main kitchen personnel would require too much space, and would not be particularly new. The organization is unusual only in its dovetailing of personnel. Each job is definitely assigned and well covered, with sufficient relief so that comparatively few

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mistakes are made. In the steward's department there are about 190 employees in addition to two dietitians, one in charge of the dining rooms and one in the main kitchen responsible for the menus. Of the 190 employees, sixty are in the main kitchen, thirty-five in the nurses' hall kitchen and dining room, twenty in the private patients' kitchen and dining room, forty-five in the administrative dining room, seven in the doctors' dining room, thirteen in the employees' dining room and ten in the commercial cafeteria. Approximately two million meals are served a year. The overhead cost per meal as it has been worked out here would not be comparable to that given by other institutions, since all expenses, such as salaries, the cost to the hospital of employees living in, laundry, gas, ice and heat, have been included.

In an institution of this size, it is particularly important that job analyses be made and that the person best fitted for each position be obtained and retained. Every effort has been made to enable each employee to adjust herself to the exigencies of her particular job. If that cannot be done to the satisfaction of the administration and to the director of the department, a shift is made within the department or a change in personnel is made. One of the most important functions of a department head is that of a shock absorber. To draw out the best possible work from an employee requires from the employer interest, enthusiasm, patience, firmness, stability and, sometimes, inspiration. From employees we expect cheerful and willing service to the best of their ability and a spirit of cooperation.

Although I cannot offer any figures, I may say that the turnover in the department is low, and the morale is high. Which is the corollary of the other? It is rather difficult to say, but I do know that they are both promoted by the general spirit of the hospital.

## Making Practical Dietetic Training a Part of the Nurse's Course

A knowledge of dietetics, practical rather than theoretical, should be a part of every nurse's training if she is to be notably successful in her chosen field, Irma Law, inspector and field representative, Missouri State Board of Nurse Examiners, points out in the *Journal of the American Dietetic Association*.

The nurse must know not only what the patient should have, but how to provide it and how to satisfy the patient with food. She must understand the principles of nutrition; she must know something of food costs; she must know something of food preparation and of psychology in relation to good digestion.

"In the hospital that has an efficient dietitian, the nurse's responsibility is not so great," Miss Law emphasizes. "But in a home she must bear more responsibility. She must either prepare the food or supervise the cooking. She must know how to cook. She must also know how to cooperate if she is to get the patient's food needs satisfied with the least trouble to herself and to the household."

She continues: "To give the youthful student a sense of responsibility along with a nicely of technique, is a major problem in all schools of nursing, and in relationships other than in connection with the patient's food. In the diet kitchen, on the ward and at the patient's bedside, this problem of tact and diplomacy, so far as the nurse is concerned, is of equal importance with scientific knowledge and technical skill. A course for student

nurses in the psychology of feeding the patient seems indicated.

"The nurse is expected to be informed on matters pertaining to diet for normal individuals in all walks of life. Most nurses, whether in private duty, institutional or public health work, are dependent upon their basic training course for their knowledge of foods and nutrition.

"The student nurse is dependent upon the dietitian for one of the most vital parts of her professional education. It is unfortunate that the latter is often handicapped in teaching the student nurse, because of her lack of time for personal contact with the patient. On the other hand, nursing superintendents, head nurses and supervisors are not as familiar as they ought to be with the dietary department and with the dietitian's problems. The dietitian should be seen and heard more often at faculty and supervisors' meetings in schools of nursing."

## Saskatchewan's Traveling Dietitian and What She Does

A traveling dietitian, whom the government of Saskatchewan appointed to the public health staff in 1928, has under her supervision small hospitals of from twelve to fifty beds. These hospitals employ a graduate nursing staff but they do not have a resident dietitian. Alice C. Langley, the traveling dietitian for Saskatchewan, outlines her work in an article in the *Canadian Nurse*.

For the first year Miss Langley's work was confined to the Union Municipal Hospitals.

Most of the nursing staff, all graduates, of the hospitals she visits have had a dietary course and diet kitchen experience during their training. The kitchen staff of these small hospitals, however, have had little or no experience of hospital cooking and diets.

In addition to cooperating with the matron and through her with the kitchen and nursing staff, the traveling dietitian takes control of the kitchen for two weeks. The cook usually is glad to follow instructions closely. A series of ten lectures is held in the evening, the first four being theoretical. The remaining six are a combination of a lecture and a practical demonstration.

## Fourth Edition of "The Newer Knowledge of Nutrition" Now Available\*

The fourth edition of "The Newer Knowledge of Nutrition," by E. V. McCollum and Nina Simmonds, is off the press. Doctor McCollum is professor of chemical hygiene in the school of hygiene and public health, Johns Hopkins University. Doctor Simmonds was formerly associate professor of chemical hygiene in the same school.

Among the striking features of this edition are: a discussion of the etiology and treatment of anemias, both pernicious and secondary; a discussion of all that is known about the dietary requirement for blood regeneration; a discussion of recent findings concerning the control of goiter through the provision of iodine; the presentation of the story of the discovery of the mother substance of vitamin D—ergosterol; a discussion of the relation of diet to pellagra in the light of recent researches.

\*The Macmillan Company, New York City.

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*as compared with the original goal of \$500,000 and the general expectation throughout the city that the total would not exceed \$200,000 or \$300,000.*

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"The Board of Directors also wish to extend its thanks to Mr. Olson, representing the firm of Messrs. Ward, Wells & Dreshman, and his associates for the very efficient work they have done in respect to this campaign."

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This hospital's experience is not unusual. Hundreds of others have been equally successful in campaigns directed by Ward, Wells and Dreshman.

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## OUT-PATIENT SERVICE

*Conducted by MICHAEL M. DAVIS, Ph.D.,  
Director for Medical Services, Julius Rosenwald Fund, Chicago*

# An Evening Clinic and What Its Services Include

By J. J. GOLUB, M.D.  
Director, and

REBEKAH F. DUNNING, A.B.

Assistant Supervisor, Out-Patient Department, Hospital for Joint Diseases, New York City

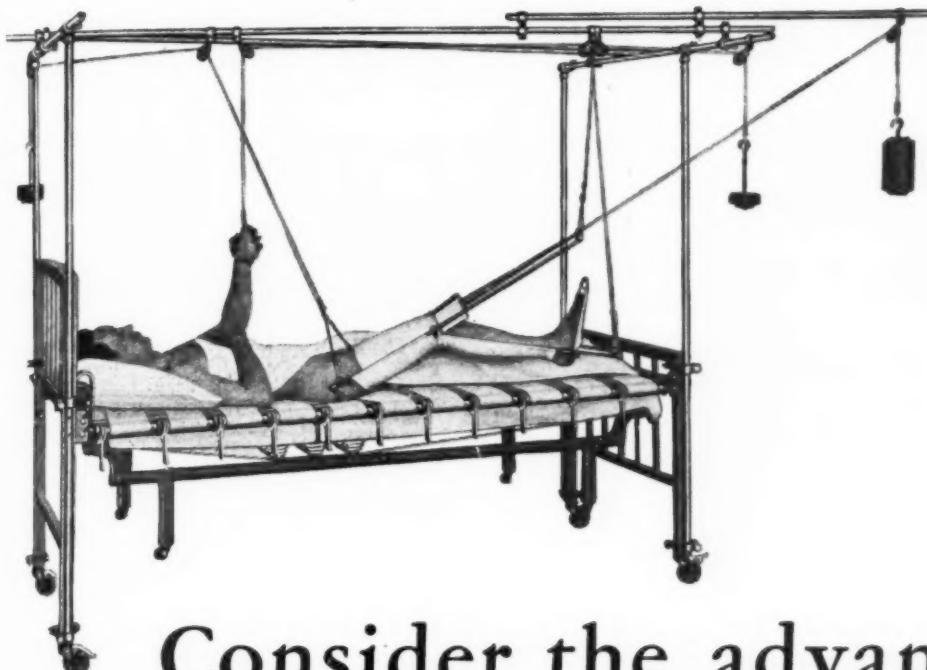
Clinics for the ambulatory sick have contributed greatly to the medical care of patients in poor circumstances. In recent years, the services offered by clinics have greatly exceeded in scope those offered in the past. For this reason, perhaps, certain medical practitioners and others who seek to limit present clinic activities have made vigorous attacks on the out-patient departments of hospitals. They have opposed the methods employed, declaring that the work done in clinics and out-patient departments constitutes unfair competition with work that is done in private medical practice.

The questions that immediately present themselves are whether there really is any unfair competition since medicine in clinics is practiced by physicians and by no other group of professional men and whether any alleged competition, fair or unfair, is more intense than that existing between practicing physicians in any community.

A clinic provides the services of volunteer physicians to examine and treat the ambulatory sick, attempting thereby to give, at no fee or at nominal cost, medical care which, when indicated, may include time consuming and expensive laboratory tests, x-ray examinations, basal



*This is a convenient type of registration booth for use in an out-patient department.*



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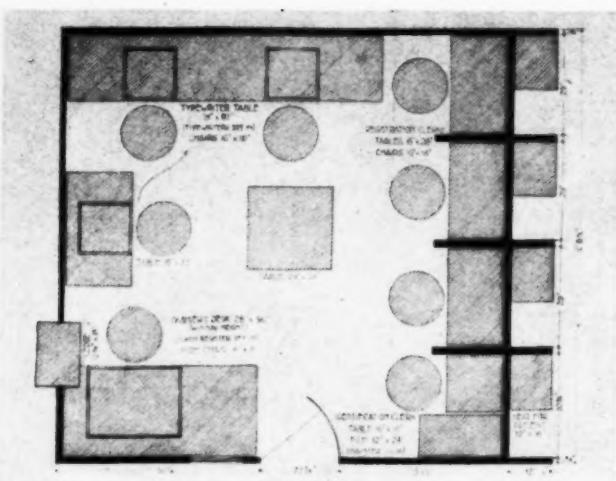
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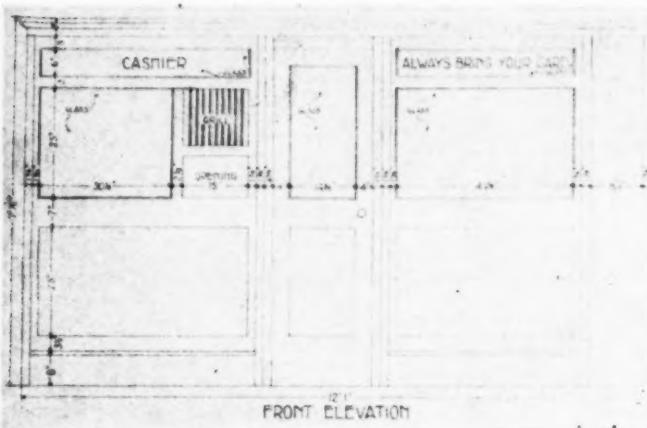
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The floor plan of the registration booth is shown above and the plan of the side and front elevations below.

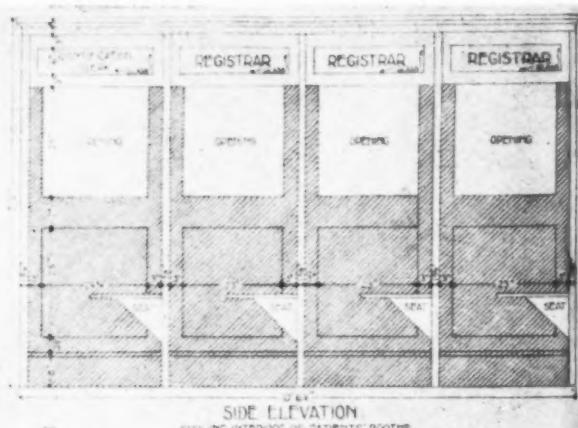


New York City, established an evening clinic. The clinic was started about ten years ago and is now open every Monday and Thursday evening. This hospital is not alone in offering an evening service, as is evidenced by the fact that out of 104 clinics and out-patient departments in New York City, twenty-five conduct evening clinics. Most of this latter group, however, offer treatment of a special rather than a general nature and the Hospital for Joint Diseases offers almost all the usual services.

If any proof were needed of the popularity of evening clinics, it need only be pointed out that from 300 to 500 patients visit these clinics during an evening session. The nine major services of the hospital are subdivided into eleven clinics, which in 1929 gave 32,295 consultations.

The accompanying table shows a typical evening's work.

It is interesting to watch the patients as they enter the building and proceed in orderly fashion to their particular destinations. The doors of the out-patient



metabolism tests, electrocardiography, various forms of physiotherapy and other services, which in most instances do not come within the reach of a vast proportion of a clinic's clientele. The reputation of clinics and out-patient departments is now well established. Satisfied patients propagate by word of mouth the excellence of clinic service. Persons in poor circumstances have learned that specialists are in charge of clinics and that for a nominal fee they may receive treatment from physicians whose private fees they could not possibly pay.

With the general tendency toward improved service, the growth of clinics continues, and like all far-reaching and countrywide movements, which not infrequently find themselves under fire from contemporary groups (in many instances not unjustly), clinics go on, their patronage increases and the public in general seems to benefit. Among those who benefit are many persons gainfully employed. Many are housewives with heavy domestic duties and many are children of school age. These patients often require treatments over long periods, such as massage, mechanotherapy, muscle education, corrective exercises, electrotherapy, hydrotherapy, thermotherapy and phototherapy.

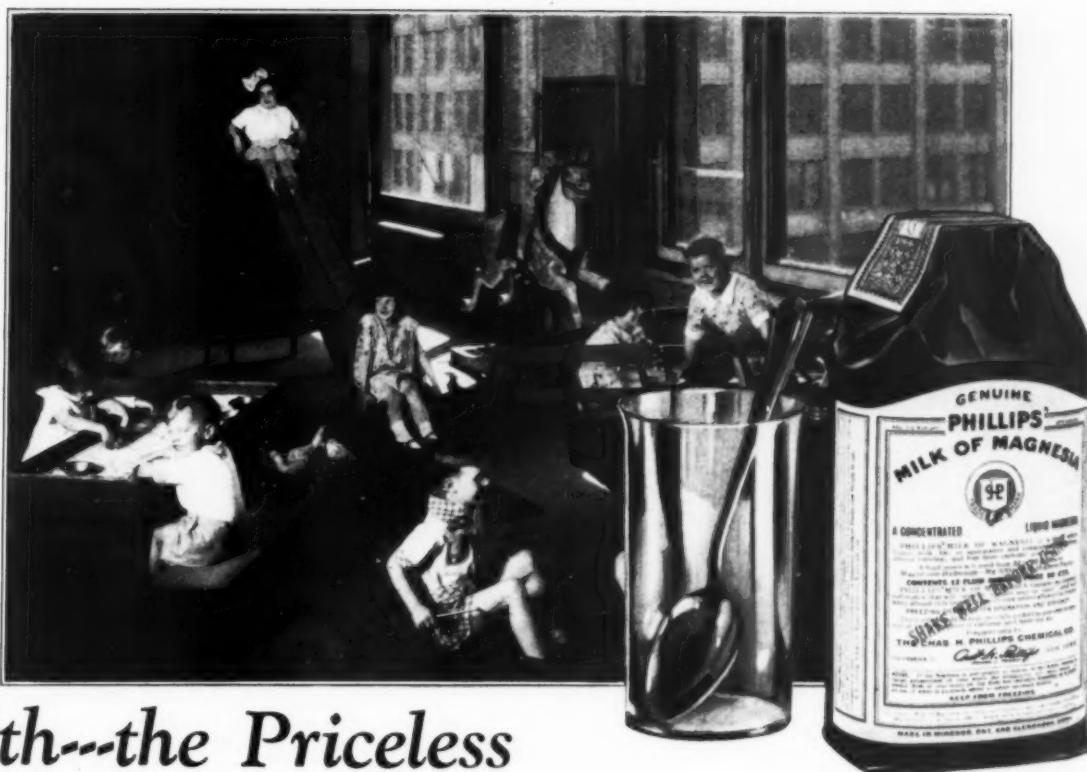
To meet the needs of this large group of patients who would otherwise not receive any medical care or would be forced to attend day clinics and suffer a substantial loss of earnings or loss of time from school, and to meet the needs of housewives who cannot possibly come to the clinic during the day, the Hospital for Joint Diseases,

department open at 6:30 p.m. Patients form in two lines, the old and the new. After passing the history department the old patients approach the cashier's window in one line. The new patients pass the identification clerk through whom they are cleared and are interviewed by social service workers as to their social and economic status.

To facilitate traffic and to permit more orderly and speedy disposition of patients, a unique and compact central booth was constructed. This is shown in the accompanying illustrations. Its dimensions are 10 feet 6 inches by 12 feet, and it provides working space for four registrars in separate booths, two typists and a cashier. This arrangement is particularly satisfactory

#### DISTRIBUTION OF PATIENTS DURING AN EVENING'S WORK

Clinic	Patients	Per Cent
Physiotherapy	155	34.9
Varicose veins	110	24.9
Orthopedics	68	15.3
Cardiology	38	8.5
Lues	30	6.8
Ear, nose and throat	24	5.4
Dentistry	9	2.0
General medicine	6	1.3
Surgery	4	0.9
	444	100.0



## Health--the Priceless Asset....

RESTORING the sick to health, while originally the only function of the hospital, is more and more being supplemented by the service of keeping well people well, and all over the country hospitals are taking active leadership in health educational work. Particularly among children the ideals of healthful living and invigorating habits are meeting with excellent results.

Quite properly the service of any hospital includes educational work with resident patients, out-patients, and through its community contacts—educational work among both children and adults to the end

of preventing those abuses of right living which lead to ill balanced metabolism which so frequently shows itself through a diminished alkalinity of the blood and tissues due to an excess of acid products—acidosis.

Gastric hyperacidity, acidity of the mouth and other of the more obvious manifestations of acidosis are promptly counteracted by "Phillips Milk of Magnesia" which has a pronounced affinity for acids, the harmless resultant compounds being readily excreted. Further, it has the additional merit of being laxative, a quality of importance here since constipation is so frequently the underlying cause of hyperacidity.

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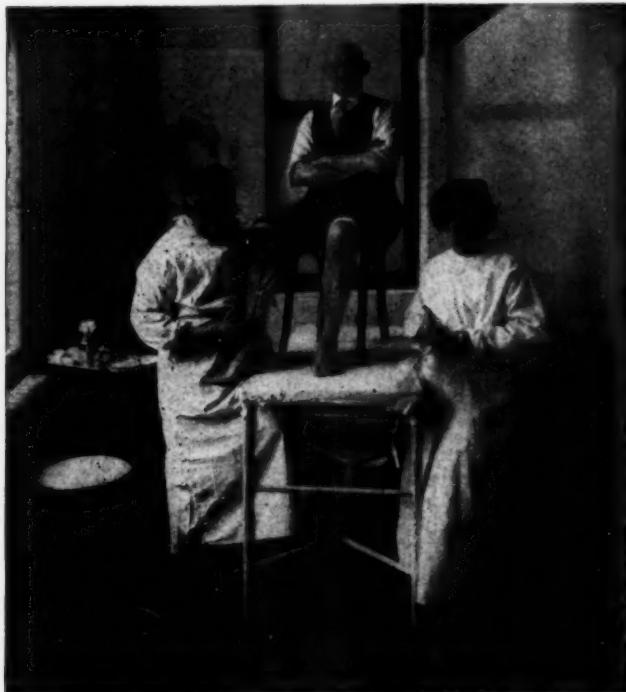
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NEW YORK

in that it affords privacy to new patients while they are being interviewed.

The clinics are distributed over all the seven floors of the out-patient department building. Those especially featured are the varicose vein, cardiac, luetic and physiotherapy clinics.

The varicose vein clinic, which is of particular interest, is a subdivision of the orthopedic service. As far as is known it is the first clinic of its type in the United States to treat varicose veins by the injection method. This method has now passed the experimental stage and has been found a satisfactory form of treatment for



*This patient is receiving treatment for varicose veins in the evening clinic.*

varices and ulcers. Until the introduction of this treatment, the only remedies advised were the wearing of elastic stockings for support or an operation for excision or ligation of the veins, depending upon the severity of the condition. Briefly, the injection method consists of injecting 1 to 10 cubic centimeters (the quantity depending on the size of the vein) of either a 20 per cent sodium chloride solution or a 30 per cent sodium salicylate solution. The chemical scleroses the vein wall and produces an aseptic phlebitis which eventually obliterates the vein. At the end of two or three days, another section of the vein may be injected. The number of injections depends upon the extent of vein involvement. The hardening produced in the vein disappears by absorption at the end of one to six months.

Since its inception, the varicose vein clinic has given 12,423 consultations, 1,800 during 1928 and 10,623 during 1929, the latter representing an increase of 490 per cent. This clinic has to its credit 24.9 per cent of all evening visits, and while the average number of patients per session is 110 the number treated often rises to 200 in one evening. The pressure increased so rapidly that the hospital was obliged to add one afternoon session a week.

The cardiac clinic is a subdivision of the general medical clinic. It functions in cooperation with the New York Heart Association. Its usefulness as an evening

clinic was soon made apparent by the large number of patients who sought its services. It demonstrated the existence of cardiac diseases in many men and women who, in spite of that condition, were capable of doing some work and earning a livelihood. Under the care of the clinic and with the constant vigilance and advice of cardiologists, many cardiac patients not only improve but manage to continue in gainful occupations. At each clinic session an average of thirty-five patients are treated.

The advantages of an evening luetic clinic in an out-patient department are well recognized. This clinic is attended each evening by about forty patients for whom semiweekly treatments are important. All are employed and would neglect specific treatment if it were not available during the evening. The popularity of this clinic is citywide and many social agencies and neighboring hospitals refer their working patients to it.

The Hospital for Joint Diseases is predominantly for orthopedic cases. About 50 per cent of all bed and out-patient department patients are suffering with diseases of the bones and joints. The other 50 per cent of the patients have general diseases and are treated in the medical, surgical, ear, nose and throat, gynecologic, neurologic, urologic and proctologic clinics. It is obvious that with such a large number of orthopedic patients, the physiotherapy department is large. This department is equipped with many types of apparatus and provides electrotherapy, hydrotherapy, phototherapy, thermotherapy, mechanotherapy, muscle education and corrective exercises. Of all the patients coming to the evening clinic, 35 per cent visit this department. Corrective exercises and muscle education services are largely attended by school children who are recovering from poliomyelitis and old fractures.

Other departments, such as general medicine, general surgery, dentistry and ear, nose and throat, have a smaller attendance but serve a sufficiently large number of patients to justify their continuance.

The hospital and the out-patient department physicians constitute one staff. The records of the main hospital are accessible to the out-patient department and vice versa. The hospital building is connected with the out-patient department building, and its 241 ward beds are open to patients of the out-patient department. These patients are admitted to the corresponding service of the out-patient department. To the advantage of doctor and patient, the out-patient department staff finds it possible to continue to observe their patients when they are admitted to the hospital wards.

The evening clinic has demonstrated its worth and the important service it renders to a large group of patients who could not attend the day clinic sessions. Moreover, the patients have increased in numbers so greatly that the hospital is considering a plan of expansion.

## Sources From Which Hospitals Derive Their Support

From what sources do hospitals ordinarily derive their support?

Taking Philadelphia as an example, the hospital and health survey recently made of that city reveals that the patients pay more than half—51 per cent to be exact; interest from investments, endowment, trust funds and rentals bring in 15 per cent; cash contributions, 4 per cent; appropriations from the two federations, 8 per cent; municipal and state taxes, 20 per cent.



*Libby's Tomato Juice cocktail, the tangy appetizer for many diets*

## *For a dozen different diets the year around . . . Libby's Tomato Juice*

HERE'S a food for an endless number of uses—Libby's Tomato Juice!

As a cocktail, in salads or relishes, it suits more than a dozen different diets the year around.

It is essential to diabetic, reducing and anti-constipation diets. For children as well as adult patients, Libby's Tomato Juice is the life of almost every type of hospital menu.

Extracted from vine-ripened tomatoes the day they're picked, Libby's Tomato Juice is rich in vitamin and mineral content. It possesses the full, natural tang of

the just-right fresh tomato flavor that appeals so strongly to dull appetites.

And Tomato Juice is only one of Libby's famous 100 Foods. Approved enthusiastically by dietitians, they are served in hospitals everywhere. Their unfailing uniformity in quality, their economy in serving and their full, concentrated flavor places them on so many diets.

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*Tomato Juice Cocktail*

Flavor Libby's Tomato Juice with tarragon vinegar, Worcestershire, salt, paprika and celery salt. Serve cold.

*Tomato Marquise*

Well seasoned Libby's Tomato Juice, to which add a small amount of sugar. Salt and freeze to a thick consistency. Delicious served with meats.

*These Libby Foods of finest flavor are now packed in regular and special sizes for institutions*

Tomato Juice  
Olives  
Pickles  
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Catchup  
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Spinach  
Jams, Jellies  
Evaporated Milk  
Salmon

Santa Clara Prunes in  
Syrup  
Strawberries  
Loganberries  
Red Raspberries  
Bouillon Cubes  
Beef Extract



## HOSPITAL EQUIPMENT AND OPERATION

With Special Reference to Laundry, Kitchen and Housekeeping Problems

Conducted by C. W. MUNGER, M.D., Director,  
Grasslands Hospital, Valhalla, N. Y.

# A Mechanical Index for Medical or Hospital Records

By EDWARD L. CORNELL, M.D.  
Chicago

THE cross indexing of medical diagnosis, operations and similar procedures in hospitals and in private practice has always presented a problem.

At the present time the various systems in use are unsatisfactory since under each subject there is recorded only the case number. If a physician wishes to secure additional data on a patient it is necessary to do one of two things—either to refer to the original record or to trace the number on the correlated cross index cards. If he should wish to make a study of certain phases of any subject, he must trace back all of the records and look

through many sheets in order to learn all the facts. The system is cumbersome and time consuming. Since it involves a considerable amount of writing, mistakes are likely to occur in the transfer of case history numbers. If a mistake is once made it is difficult to trace the history that should be on the cross reference card.

An ideal cross reference system is one in which the summary card or cards contain all of the essential information. It should be filled out with the minimum amount of writing. All of the information on the card should be readily and quickly classifiable. The system should not be expen-

NAME	H.K.	DR. CORNELL			OBSTETRICS		DATE Jan 29 1930 No. 2647		
		1	2	3	1	2	3		
1 ABORTION	THREATENED	THERAPEUTIC	CRIMINAL		20 LABOR	PROLONGED			
2 ABORTION	INEVITABLE	SEPTIC	HYDATID		21 LABOR	TEST OF			
3 ANESTHESIA	ETHER ✓				22 LABOR	PREMATURE ✓ DRY			MULTIPLE
4 ANESTHESIA	ETHYLENE		NITROUS OXIDE		23	DILATATION & CURETTAGE			
5 ANESTHESIA	LOCAL				24	EPISIOTOMY			
6 ANALGESIA	GWATHMEY				25	PERINEORRHAPHY			
7 ANALGESIA	MORPHINE		MORPHINE SCOPOLAMIN		26	TRACHELORRHAPHY REMOVAL OVUM			DUHRSSEN'S INCISIONS
8 BLOOD PRESSURE	HIGH 140+		LOW 100		27 PARA	1			
9 BREAST	ABCESS		DRAINED		28 PARA	2			
10 CERVIX	OLD LACERATIONS	CYST & TUMOR	EROSION		29 PARA	3 TO 6			
11 DELIVERY	BREECH EXTRACTION				30 PARA	7 TO 9	10 TO 12		13+
12 DELIVERY	OPERATIVE ✓				31 PERINEUM	INFECTED			INTACT
13 DELIVERY	NORMAL				32 PLACENTA	EARLY EXPRESSION			
14 ECTOPIC	RUPTURED	ABORTION & OVARIAN	INTACT & ABDOMINAL ✓		33 PRESENTATIONS O.L.A.				O.D.A.
15 FEVER	LABOR		PREGNANCY		34 PRESENTATIONS O.D.P.				O.L.P.
16 FEVER	PUERPERIUM ✓	CAUSE absorption			35 PRESENTATIONS O.L.T.				O.D.T.
17 FORCEPS	LOW				36 PRESENTATIONS BREECH		BROW & FACE		TRANSVERSE ✓
18 FORCEPS	MID				37 TUBE	LIGATION			SALPINGECTOMY
19 LABOR	AT TERM								

E. L. CORNELL, M. D.

This card is one of a series of four cards of different colors that present the summary of an interesting case of abdominal pregnancy.

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*Mallinckrodt*

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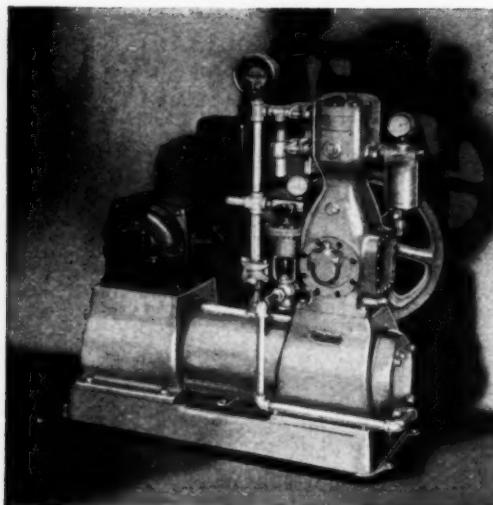
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*"We are getting twice as much refrigeration at TWO THIRDS our former cost"..... Joe Barish*

Figure it out—that's the same amount of refrigeration at *one-third* former cost. No wonder Mr. Barish, of Barish and Webberman Produce Company, Dallas, Texas, is enthusiastic about this Lipman Electric Refrigeration. He says further, "When we say cost, we mean cost of electrical power, water, oil, grease, etc., and also 10% per year depreciation on the compressor, motors, pumps, brine tank, cooling tower, etc."

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Without obligating me in any way, please send me your book of refrigeration facts.

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Address .....

sive to operate. It should be elastic enough to include any special study that the physician may wish to undertake without referring to the original history. It should be simple enough to obviate the services of a medical person in its operation. Such a system I believe I have been able to elaborate.

I have taken a machine that is on the commercial market and have adapted it to medicine. It answers all of the requirements suggested for the ideal system. Since



*This mechanical tray permits the selection of a card or group of cards in a file to be mechanically controlled.*

I am interested in obstetrics and gynecology I have considered only this department of medicine. There is no one subject more complicated from a cross index standpoint than the subject of obstetrics. A pregnant woman is subject to as many diseases and complications as a nonpregnant woman; she may also have any of the surgical complications of the nonpregnant woman. The baby is an individual and is liable to its many complications and diseases. Any system, therefore, that thoroughly cross indexes the subject of obstetrics mechanically is ideal.

Typical cards are made out for complicated cases. One such card is reproduced here. These cards are placed in a special filing box, after which they may be summarized on

*Index tabs are at the bottom of the card where they can be selected by mechanical fingers controlled by the keyboard.*



a summary sheet, an example of which is appended to this article.

At first glance this system looks complicated, but the cards require only the name, date and case number while all of the other items are only checked. The card is perfectly legible. If the office procedure is to file by number, the corresponding card may be easily removed for further study since each of these cards has a different color. The information may be condensed on a single

## Days of a Million Smiles

CHILDHOOD days are days of a million smiles for happy, healthy youngsters like these. They laugh when pleased—cry when their feelings are hurt—eat heartily—sleep peacefully . . . and you can almost see them grow.

If your child is in this group you want to keep him healthy. And the way to do it is to take him to your physician periodically for a complete physical check-up—and to your dentist regularly to be sure he will always have perfect, pearly-white teeth.

If your child isn't so fortunate, take him to the physician and dentist, too, because they probably can tell you the cause, which may be minor and easily corrected if discovered early in life.

In every examination x-rays should be employed generously "*to reveal the invisible*" in that growing young body—to be sure of the same soundness inside and out.

*Let your physician and dentist keep them physically fit.  
Send for our booklet, "How X-rays Aid the Public."*

**EASTMAN KODAK COMPANY, Medical Division  
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Gentlemen:

Please send me "How X-rays Aid the Public." I understand that this does not obligate me in any way.

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Street and Number \_\_\_\_\_

City and State \_\_\_\_\_

# WINDOWS



IN-SWINGING TYPE  
SEALAIR WINDOW



Continuous  
Weather-proof hinge.  
Patents applied for.

## VENTILATION

In-swinging Sashes permit controlled ventilation, without unpleasant drafts.

## CLEANING

May be washed entirely from the inside.



Application of  
shade. Translucent  
glass in transom.

## INSULATION

When closed, insulation between sash and frame protects against weather.

## SAFETY

Difficult for anyone to fall or leap out.

## NOISELESS

Sealair Windows will not rattle—operate easily, silently and independently.

Furnished in Bronze, Aluminum Alloy or Steel. All joints strongly welded.

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SEALAIR  
WINDOWS

THE KAWNEER COMPANY, NILES, MICHIGAN  
KAWNEER MFG. CO., BERKELEY, CALIF. (SUBSIDIARY)

Manufacturers of  
RUSTLESS METAL STORE FRONTS, WINDOWS AND DOORS

card or it may be outlined in detail. The cards may be printed or mimeographed. If the physician wishes to make a special study of some particular subject—for instance, heart disease in pregnancy and labor—a special card may be mimeographed and various items checked on it. The summary of all complications can then be easily obtained mechanically without visual effort.

There is on the market a mechanical index that permits the selection of a card or a group of cards. Automatically, by means of a mechanically controlled keyboard, it selects cards and elevates them three-eighths of an inch above the body of filed cards. Each tray has a capacity of 1,000 cards.

Operation of the machine is a masterpiece of simplicity. Index tabs are at the bottom of the cards where they are selected by mechanical fingers. There are just as many tabs as there are keys, each tab being controlled by a corresponding key. When an individual card, or a classification of cards, is desired, depressing the proper key representing the respective tabs immediately elevates the wanted card or group of cards.

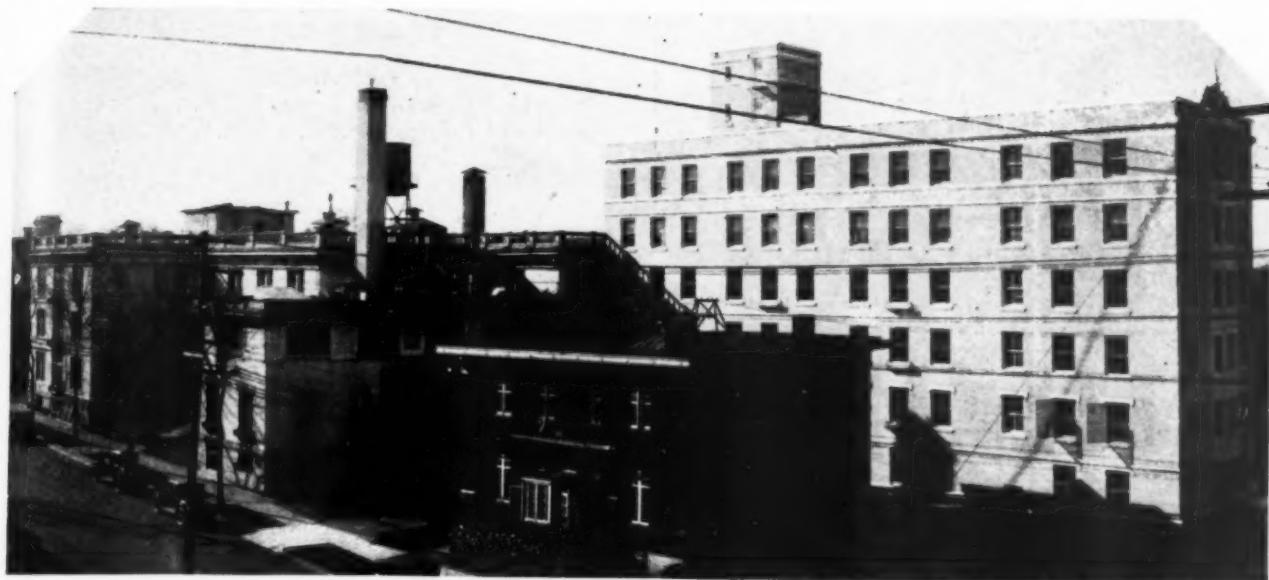
By mechanical side rails, the machine further classifies cards that are elevated. In the illustration of the card shown here it will be noted that the subjects are divided into three columns. After the cards are elevated they can be further divided. By pressing key No. 1, all of the cards punched for column No. 1 will remain elevated while the others are depressed. The same holds true for Key No. 2 and Key No. 3.

At the present time the hospital superintendent and the medical staff have an intricate method of getting an inventory of what has been done in a given period of time. This system enables the superintendent to summarize quickly all the work that has been done in the hospital in the separate departments. The time covered may include a week, a month, six months or a year. The superintendent, the board of directors and the medical staff are entitled to accurate information at reasonable intervals in order to determine whether the staff and patients are securing the best services that can be given. For instance, by this system, I can pick out in a few minutes the number of cases that are showing abnormal temperatures, in the same way the chief of staff can determine whether Doctor Jones or Doctor Smith is having too many temperatures in obstetrics.

This system has an advantage over any other system at present on the market in that the physician or the hospital may buy the machine and own it. Other mechanical tabulators are only rented, which means that in the course of time the machine is paid for many times over.

## SUMMARY SHEET 100 CARDS

Asphyxia Livida	2
Asphyxia Pallida	1
Asphyxia Intra-Uterine	1
Breasts Engorged	2
Breasts Abscess	0
Circumcision Mohel	10
Circumcision Physician	17
Death Antenatal	0
Death During Labor	0
Death Postnatal	1
Deformities Clubfoot	1
Deformities Amputations	0
Deformities Excess Digits	0
Deformities Harelip	1
Deformities Cleft Palate	0
Deformities Mongolian Idiot	1
Deformities Hydrocephalus	0



SWEDISH HOSPITAL, SEATTLE, WASHINGTON, TREATS FLOORS WITH CAR-NA-VAR

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OTTO ROSELEAF, Contractor

# “Produces an Excellent Finish on Wood and Linoleum Surfaces”

“And is Economical, easily applied” says Swedish Hospital

**N**OW—hospital floors wear longer, always look attractive and are easy to keep clean when treated with Car-Na-Var, the perfect floor treatment.

“The Swedish Hospital has been using Car-Na-Var floor treatment for some time,” writes N. E. Brock, Supt., “we find it very satisfactory. It is economical, easily applied, and produces an excellent finish. Both wood and linoleum surfaces

are much improved by this treatment.”

Car-Na-Var is a scientific combination of varnish gum and waxes for treating floors of wood, linoleum, mastic, cement, cork, terrazzo, etc. It gives a beautiful, lustrous finish that is enhanced by traffic friction. Protects the floor surface from wear and is extremely easy to clean. It is obtainable in “Natural” and the following colors: Dark Oak, Light Oak, Mahogany, Walnut, Olive Green, Bright Green, Mission, Maroon, and Cherry.

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TRADE MARK REG. U. S. PAT. OFF.  
THE PERFECT FLOOR TREATMENT

On floors of Rubber, use  
—works like Car-Na-Var

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After all; what interests  
YOU most is what Car-  
Na-Var will do for YOUR  
floors. The best way to  
answer that is by actual  
use—hence our free test  
offer. Mail coupon for  
full details—no obligation  
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**Make this  
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Gentlemen: Please send me full details about Car-  
Na-Var and your free test offer.

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Our Floors are \_\_\_\_\_

# 329 NURSES' SIGNAL-PHONES

*to be installed in*

CHRIST HOSPITAL, CINCINNATI



AT EACH BEDSIDE in Cincinnati's newest and most modern hospital will be a Dictograph Nurses' Signal-Phone—newest and most modern of nurses' calling systems.

Signal-Phones provide, in addition to the customary door lamps and signals at the nurses' station, a unique telephonic contact between patient and nurse made possible by the super-sensitive Dictograph microphone and "soft speaker." The Signal-Phone System saves time, footwork and delayed service to the patient.



To summon a nurse, the patient merely presses a push-button within easy reach. Immediately, the door lamp and the signal at the nurses' Signal-Phone tell which patient is calling. The nurse lifts a receiver, raises the key under the signal and speaks to the patient.



At the bedside, the nurses' voice issues clearly and distinctly from the "soft speaker" of the patients' Signal-Phone. The patient makes her request—without handling a receiver or mouthpiece. Her voice is transmitted immediately to the nurse by a sensitive microphone.

The nurse is thus saved the usual preliminary trip and the patient is served in double quick time. In every way the Nurses' Signal-Phone meets the most exacting requirements of modern nursing procedure.

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Deformities	Microcephalus	0
Deformities	Anencephalus	0
Deformities	Pyloric Stenosis	0
Deformities	Imperforate Anus	0
Deformities	Spina Bifida	0
Deformities	Miscellaneous	0
Diseases	Heart	0
Diseases	Syphilis	0
Diseases	Icterus	4
Diseases	Atelectasis	0
Diseases	Status Lymphaticus	0
Diseases	Thymus	0
Diseases	Hemophilia	0
Feeding	Breast	95
Feeding	Complement	1
Feeding	Supplement	4
Fractures	Clavicle	0
Fractures	Femur	0
Fractures	Humerus	0
Male		51
Female		49
Fever	First Ten Days	23
Hemorrhage	Brain	0
Hemorrhage	Scalp	0
Hemorrhage	Cord	0
Hemorrhage	Melena	0
Hernia	Umbilical	0
Hernia	Diaphragm	0
Hernia	Inguinal	0
Infections	Impetigo	0
Infections	Pemphigus	0
Infections	Ophthalmia	0
Infections	Perionychia	1
Infections	Mouth	1
Infections	Cord	0
Injuries	Paralysis (Face)	1
Injuries	Scalp	0
Monsters	Single	0
Monsters	Double	0
Operations	Head	0
Operations	Abdomen	0
Operations	Miscellaneous	0
Child	Premature	2
Child	Postmature	1
Transfusion	Subcutaneous Blood	0
Transfusion	Intravenous Blood	0
Transfusion	Salt Solution	0
Transfusion	Serum	0
Caput	Sucedaneum	10

## Porcelain Refrigerators Especially Built for Institutional Use

Three new models of porcelain refrigerators, especially designed for hospital, hotel, school and institutional use, have recently made their appearance on the market. These models are of white porcelain inside and out, with blue gray trimming of hardware that is of modern design.

The walls of these refrigerators are five inches thick, heavily insulated with four inches of corkboard and sealed with cement. The framework is of rigid construction. The refrigerators are built for either machine or ice refrigeration, and studs are provided in the cooling chamber for cooling units.

The capacity of the largest model is fifty-six and a half cubic feet, that of the second, forty-three and one-fifth cubic feet and that of the smallest, thirty-two and three-fifths cubic feet.



**"sweet  
sixteen".....**

"and never been" . . . . cussed.

That may stretch the truth just a trifle. But when you are sixteen who cares. And we're sixteen this month. Sixteen delightful, progressive, profitable years. Sixteen years of making friends. Sixteen years of working with the finest folks in the world. Life seems good at sixteen.

Here's our thanks to you folks who are helping us to build a business which we hope will still be progressive, healthy and happy when we pass the century mark.

WILL ROSS, Inc., 457-59 E. Water St., Milwaukee, Wis.

**WILL ROSS**  
INCORPORATED  
HOSPITAL SUPPLIES

## THERE'S PROFIT IN THIS BEAUTY



*The vastly improved new De Luxe Sunkist Electric Extractor. Finished in rich Parthenon Green Duco or non-tarnishing Chromium.*

### EASIEST, FASTEST, MOST ECONOMICAL EXTRACTOR

SOLD at "cost"! Millions are being spent to advertise the health value of Sunkist orange juice. We know that if your customers see you serve genuine fresh fruit orangeade and lemonade, it will increase your sales. Hence this no-profit offer.

The lasting beauty and sparkling cleanliness of your extractor actually encourages more sales for you, too. The mere wipe of a damp cloth will keep this new extractor brilliant indefinitely. *Absolutely easiest to clean!* Just flush the extracting bulb and china bowl under a faucet. That's all!

Saves its cost quickly. By test, 3 oranges give as much juice as 4 extracted by "hand" types—pure, rich juice with no bitter oil from the peel. Merely cut an orange—zip . . . zip—and you have every bit of the juice. Electricity does all the work.

Order from your jobber, \$45 less 2% 10 days, f. o. b. Chicago. Fully guaranteed. Or mail the coupon for further particulars.

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Department of Fresh Fruit Drinks

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Without obligation, send us further information about the NEW DE LUXE MODEL Sunkist Fruit Juice Extractor.

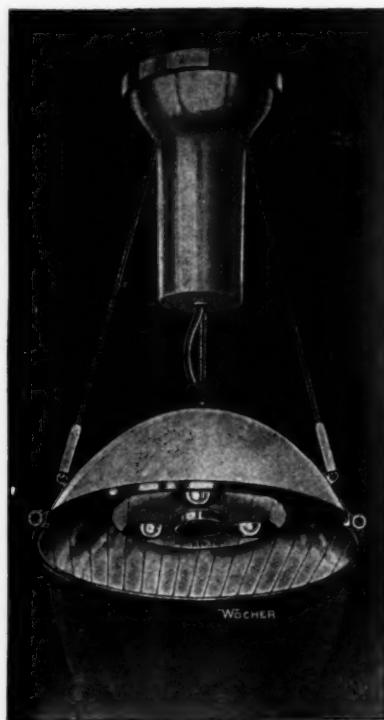
Name .....

Address .....

City..... State.....

My Jobber is.....

## THE RIES-LEWIS OPERATING LIGHT



### A FEW REASONS FOR CHOOSING THIS LIGHT

1. It throws a clear, shadowless light that is of correct intensity, that eliminates glare and eyestrain and that successfully diffuses shadows that are ordinarily cast by the head or hand of the operator.
2. The emergency features engender a sense of security which dispels all fear of accident through failure of the lighting circuit.
3. It is a pleasure to take care of this light. It requires no attention other than an occasional removal of dust or replacement of a lamp.
4. No glass mirrors or reflectors are used. Everything has been done to make this fixture as durable as possible.

For convenience in cleaning the wired glass protection screen is hinged, giving access to the interior of the lamp without the necessity of removing the entire screen.

*Send for our new descriptive folder*

**THE MAX WOCHER & SON CO.**  
Surgical and Hospital Supplies  
29-31 W. 6th St. CINCINNATI, O.

### Hospital Perfects "Head of the Bed" Lamp

One of the most satisfactory lighting fixtures of the new wing of Waterbury Hospital, Waterbury, Conn., is a new "head of the bed" lamp, that was perfected at the hospital. Considerable time and study were devoted to the consideration of a light that might be fastened to the wall and yet provide the kind of illumination the patient desired. No such light was found on the market and experts at the hospital set themselves to the task of planning a fixture that would suit their requirements.

The light is illustrated in the accompanying photograph. The cord attached to the pendant switch is of sufficient



length to allow it to be so placed that it will be easily accessible for the patient. There is a bracket consisting of a turned cast brass arm with oval cast back plate, which is held firmly to the wall by a threaded shoulder and screw bead. The back is drilled and fitted with rubber brushing, for use with the cord and pendant switch, which permits the patient to control the light with minimum effort. The socket fastens to a ball joint. The reflector may be directed toward the wall to permit indirect light or forward for direct reading or dressing light. The socket is equipped with a spun metal reflector, aluminum finish inside. It may be finished in polished brass, ivory or white enamel finish.

### Oil Is Cheaper Than Coal This Hospital Finds

St. Barnabas Hospital, Minneapolis, Minn., during the first four months of 1930 saved \$943.75 by the use of oil instead of coal in the hospital heating plant. The saving on coal alone is found to be \$724.75, according to Harriett S. Harry, superintendent, and that on the cost of hauling away ashes, \$219.00.

The figures for the first four months of this year are compared with the corresponding period for 1929, before St. Barnabas Hospital had changed from coal to oil heating.



# They Both Agree

*That was just about the finest bath ever!*

*A cooling soothing soap that cleans so gently it's really an ointment.*

## MIDLAND BABEOLEUM The Perfect Baby Soap

is absolutely pure. Composed of the finest oils and mineral free saponifying agent. Hospitals in every locality are recognizing the superiority of this liquid soap for nursery use.

Such a little is required that now the finest product is the cheapest.

### MIDLAND BABEOLEUM IS PURE

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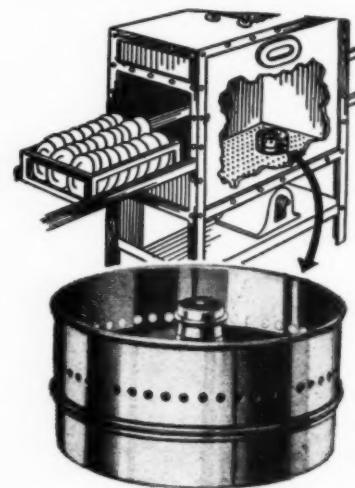
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The Hunt & Dorman Mfg.  
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## Keeping the Wash Water Solution at a Uniform Strength

Practically every hotel, club, restaurant or hospital of any size to-day depends on a dishwashing machine or a battery of them to ensure speed and efficient handling in the washing of their dishes. To obtain maximum cleanliness, however, a cleansing powder is always added to the wash water in these machines, which is efficient only as long as the wash water solution is kept at uniform strength.

A device has now been perfected that automatically takes care of this problem of keeping the wash water



The automatic  
regulator can be  
used in any dish-  
washing machine  
and is adjustable  
to any capacity.

at the required strength without constant attention and continual feeding by hand of cleansing powders. It is designed for use in any dishwashing machine.

This automatic regulator is a small device only six and one-half inches in diameter. It is filled with a cleansing powder and is then placed on the strainer sieve of the dishwashing machine. Its automatic slow feed action keeps the wash water at the proper strength throughout an entire washing period. The regulator can be used in any dishwashing machine and is adjustable to any capacity. It is never sold, but is leased to users of a special make of cleansing powders.

## Preserving the Exterior of the Building

A method of preserving the stone or brick exterior of a building from corrosion by the elements is suggested in an article in *Buildings and Building Management*.

To waterproof the surface and to retard deterioration due to the acid components of the air, an aluminum stearate, formed by the reactions of a hard soap and aluminum salts, has been found to be successful. However, this process must be repeated several times and, therefore, is expensive, the article says. Paraffin wax, dissolved in naphtha or melted, may be substituted.

Solutions of water glass, sodium silicate, are often used. These, on reaction with the carbonic acid in the air, form gelatinous silica which is set free in the pores of the stone or brick and render it proof against the weather.

A further method employs solutions of silicofluorides, especially magnesium silicofluoride. This is also used to treat concrete walls to make them damp-proof and to protect the surface from dusting. Chemists have recently added two more contributions for the preservation of stone work—synthetic resin varnishes and silicon esters.

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## Ready Made Nursing Trays Have Many Advantages

The increasing development by hospital nursing departments of the use of specially equipped trays for various types of dressings and nursing procedures is well known. A dealer in hospital equipment has recently introduced to the hospital market such trays fully equipped. An especially helpful feature is the labeling of each tray in large, permanent, easily read letters.

The trays themselves are of white enamel and of a proper size to accommodate the equipment for the par-



ticular procedure. Most of the trays have raised edges to keep bottles and other articles from falling off.

A noteworthy feature of the equipment of many of these trays is the individual sterilizing drums for dressings. The drums, about the size of a small sponge jar, may be packed with the particular dressings needed for a special type of tray, sterilized and then set directly upon the tray. This eliminates the boiling up of sponge jars as well as the danger of contamination of dressings when they are transferred from stock drums to sponge jars.

These trays, if reasonably priced, should be of interest to superintendents, to nurses and to nurse educators.

## Enhancing the Appearance of Rubber Flooring

The maintenance of rubber flooring is discussed, along with other subjects pertaining to the manufacture and installation of rubber flooring, in a study made and recently published by the research committee of the International Rubber Association, The Hague, Holland.

"To enhance the attractive appearance and the brightness of the colors, rubber flooring should be cleaned regularly," the study emphasizes. "Rubber floors should not be washed for at least seven days after laying. Subsequent thorough and regular washing is of prime importance if the rubber is to show to best advantage. Scrubbing with a good hard brush for the first two or three months will improve the brightness of the colors and give a smooth polish to the surface, making it easier to clean."

"In rooms where there is little traffic, dry mopping, or if necessary, wet mopping will be sufficient. In those places, where heavy traffic causes the floors to become very dirty, wet mopping will not be sufficient and the rubber flooring should be scrubbed with a hard brush and hot water and soft soap or some other cleaning agent. The soap or cleaning agent should not contain free alkali or strong abrasive powders. After scrubbing, the floor should be mopped with a wet cloth."

"Under no circumstances should the flooring be flooded by pouring pails of water over it, and only sufficient water to clean the rubber effectively should be used."